

An Essay on  
the Content of Education



# An Essay on the Content of Education

*by*

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## PREFACE

ALTHOUGH THIS SHORT book is to some extent based on lectures given to audiences of teachers and 'educationists,' I hope it may interest others besides those directly concerned with education. Its object is simply to stimulate thought and discussion rather than to convey information, and if anyone, whether a teacher or not, is led by reading it to think more critically and read more deeply about the great opportunities and the no less real dangers that lie before English education, that object will have been fully realized.

In a book of this size it would be out of place to make acknowledgment of the many sources upon which I have drawn. My debt to the writings of, for example, Professor Werner Jaeger and Sir Richard Livingstone will be obvious enough. But greater even than this is the obligation which I owe to the many colleagues and friends with whom I have discussed the problems of culture and education. In particular I must express my deepest thanks to my friend and former headmaster, Canon Spencer Leeson. Though there is probably much here with which he will disagree, he bears some responsibility for it, in the sense that he was never too busy to try to help a junior member of his staff to understand the structure and purpose of education, and above all its relation to first principles. Finally, the dedication of this book to my wife is more than a formal gesture: it is the

only acknowledgment I can make of the extent to which her help has made the writing of it possible.

E.J.F.J.

*Manchester, 1949.*

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## THE GROWTH OF THE CURRICULUM

AT A TIME when many aspects of education are under constant and critical review, it is of the utmost importance that we should give the most serious attention to its actual content. Year by year there accumulates a vast literature concerned with the problems of education: it is studied, discussed, and written about by educationists, administrators, and even teachers, with an almost alarming fluency. Yet much of this largely new work is devoted to machinery and organization or to borderline studies such as psychology. Questions as to what should be taught to particular groups of children have become of almost secondary importance, if we are to judge by the amount of really serious thought that is devoted to them. The acquisition of a certain body of knowledge as one of the desirable ends of education seems to be discussed less often, and certainly less intelligently, than the means by which activities may be stimulated or particular habits of thought inculcated, although presumably activity must use some material, and thought must be about something. Similarly the machinery by which children may be allocated to certain kinds of school, or the evils of allocating them at all, attracts far more attention than the problem of what to teach them in the schools in which they do ultimately find themselves. Even when discussions of

the curriculum do take place they are too often at the superficial level of those who complain that neither office boys nor science graduates, nor even the employers who complain about the office boys, can write English. Alternatively such discussion degenerates into a dispute between rival claimants for space in the timetable, or into a series of *ex cathedra* pronouncements by those whose criticisms are based on their own experiences in the schools of forty years ago. Thus, for one who believes that the traditional curriculum contains much of the highest value the greatest danger lies less in the prospect of there being too little change than in the probability that considerable changes may be brought about on grounds of prejudiced and superficial thought and by those out of touch with the schools.

The tendency to be concerned with the learning process rather than with what is taught is to some extent justified as a healthy reaction against a view of education as the mechanical inculcation of information. It must also be welcomed as evidence of a greater concern for the methods of approach necessary when educating a whole population, and not merely an intelligent minority. But it must be constantly reiterated that teaching and learning must be *of* something, and it is clearly necessary that more careful and precise thought should be devoted to the exact nature of what is to be taught in schools and universities.

The need is, of course, particularly urgent at the present time. It is a truism that we are passing through a revolutionary phase in the history of mankind, in which new questions are demanding answers in every aspect of life, social, economic, and spiritual. It is ultimately only through the schools that the right answers can be found.

The demands upon education of discoveries in science and technology are obvious enough. No less real are those of a society which, in moving towards a more complete democracy by the wider diffusion of power and wealth, puts an ever-growing responsibility upon the wisdom and the sense of obligation of the ordinary man and woman. These demands will not be met simply by administrative adjustments or improved techniques of teaching, important though they are. One is surely justified in believing that there must be some subjects more relevant than others to the new and particular problems of our time.

Those concerned with education have a most pressing obligation, therefore, to scrutinize constantly the actual content of their teaching, so that it may be adequate for tasks that are always changing as society itself changes. The responsibility is all the greater when it is realized that the relation of society and education is a very complex one. For not only is education modified by its social background; it is one of the principal agencies for modifying society. Its function is not only to produce the kind of citizens that the community demands, in terms of intellectual and technical and moral equipment. It is also concerned to ensure that the community shall be of such a nature that it demands the right kind of citizens. It must resist both the temptation to respond too hastily to the pressure of economic needs rather than to a steady vision of what education and society should be and, on the other hand, the tendency to ignore the claims of a changing environment, and to remain isolated in an unreasoning traditionalism.

We may see some of the contemporary difficulties and confusions concerning the curriculum exemplified in the

place of science in education. Throughout the nineteenth century English higher education very largely failed to include natural science, in spite of the need for widespread knowledge of that group of subjects, and not only our economic life but our whole culture was the poorer.

To-day we are faced with the same prospect of having to increase the number of scientists. Yet we are still uncertain as to the proper nature of their education. We are, for example, far from confident in our replies to such obvious questions as, "What subjects other than science should a scientist study?"; "Is it proper to include petroleum technology as a university course?"; "Should Latin be regarded as a necessary subject for all scientists entering the university?" Answers are, of course, being given to such questions, but it is doubtful, unfortunately, whether they are being considered in the light of any general principles governing the content of education for individuals differing in intelligence and vocation. Yet if we neglect such principles, if we fail to achieve a balance between change and tradition in what we teach, we run the risk of maintaining an education that has become arid and formal, with all the social and economic evils that follow, or, on the other hand, of losing touch altogether with the sources of our civilization, and developing a culture that is superficial, rootless, and without standards of value.

If we are to understand the variety of influences which affect the content of education, and hence obtain some guidance as to the principles which we should adopt in discussing our present problems, it is necessary to see the contemporary situation in its historical perspective. The late Middle Ages provide a suitable starting-point for an

attempt to sketch the main features in the growth of our present attitude to the curriculum. The spectacle of English education at that time was in many ways a splendid one. For the primary and secondary education of the academic there was a considerable number of chantries and grammar schools, and for the final stage of education the two ancient universities. The university studies of theology, law, and medicine rested upon a foundation that consisted almost entirely of Latin language and literature. The language that was the common tongue of Christendom was both the discipline of the schoolboy and the vehicle of learning. In spite of an initial revulsion against the classical authors, Christian education had no difficulty—indeed, it had no choice—in making use of the great Latin writers. But Latin was in no sense a dead language; it was not only that in which every new work of scholarship in any subject would be written, but also that in which the business of the Church and State would be conducted. In theory medieval education had inherited from the classical world the conception of seven liberal arts as providing a basis for further specialist education. The trivium consisted of grammar, rhetoric, and logic, and was preparatory to the quadrivium, comprising arithmetic, geometry, music, and astronomy, studies thought to be more suitable for the university than the school. We can see in these subjects the influence of Plato, modified by the ideas of later Greek and Roman educators, who wished to prepare young men for an active participation in public life. But the trivium and quadrivium were never in fact studied systematically in the Middle Ages. The trivium became contracted to the study of Latin grammar and literature alone, and rhetoric

and logic were never serious school subjects. William of Wykeham's statutes for Winchester College (1382) express an attitude that dominated English education. They state that "... experience, the mistress of all things, plainly teaches that grammar is the foundation, gate, and source of all the other liberal arts," and go on to affirm that "by the knowledge of grammar, justice is cultivated and the prosperity of the estate of humanity is increased."

For those of the upper class who did not go to the grammar schools there was the education of the knight in the manor and the court, a form of training less formally organized in this country than abroad, but nevertheless a recognizable alternative to the academic education of the scholar. It offered a kind of apprenticeship in which the martial, athletic, and social accomplishments of the gentleman might be learned. For those in commerce there was a different but definitely educational system of apprenticeship, often after a period of schooling when grammar schools became ever more common in the fifteenth century. For the greater part of the population, of course, there was little or no formal education at all. But for all there was the deeply educational influence of the environment of small communities and a simple and ordered life. Above all, education was dominated by the unifying influence of the Christian Church. The Church supplied the clear meaning and the undivided purpose for every educational activity of the Middle Ages. It is of the most profound significance that practically every foundation deed of a medieval school or college contains some variant of the phrase 'godliness and good learning' as expressing the purpose of education.

The disintegration of medieval thought and society in

the Renaissance and the Reformation had, of course, considerable effects on education. But the real nature of those effects was not manifest for many years. Indeed, in spite of the numerous sixteenth- and seventeenth-century school foundations, it may well be maintained that the Reformation led to a decline in English education. Nor is this surprising. The power of the Church which had made the schools was broken as a creative force; the only other influence, that of the State, competent to stimulate and administer so great an element in the national life would not be prepared to assume that authority for three hundred years. One would expect, however, a cultural awakening as remarkable as the Renaissance to affect profoundly the actual content of education. The new interest in the classical world, a changed attitude towards nature, the commercial possibilities revealed by an adventurous humanism—all these would seem sufficient to modify the curriculum of the schools. In fact, no such revolutionary changes occurred. Greek became a permanent part of the teaching of the greatest schools, and it is true that the widening of intellectual horizons which this involved was immensely important. Hebrew was for a short time added to the curriculum of a few schools, mathematics developed into a more serious study, a certain number of foundations were created with a mathematical or scientific bias. But the picture that was once drawn of the Reformation producing a sudden quickening in the spirit of English education is now discredited. Such quickening as did occur showed itself in the creation of new schools and the criticism of existing methods rather than in drastic changes of the curriculum. The sixteenth-century foundations included

<sup>1524</sup>Shrewsbury, Harrow, Rugby, Merchant Taylors, St Paul's, and Manchester Grammar School, but, apart from a greater emphasis on Greek, it is difficult to see that their curriculum differed markedly from that of the older grammar schools. Throughout the sixteenth and seventeenth centuries, however, a number of suggestions for educational reform were put forward, culminating in those of Milton and Locke. As Sir Ernest Barker points out (and the brilliant chapter on "The Education of the English Gentleman in the Sixteenth Century" in his book *Traditions of Civility*<sup>1</sup> is to be most strongly recommended), the aim of the reformers was really to bring about a fusion of the two medieval educational traditions, the education of the clerk in the grammar school and of the knight in the castle. Sir Thomas Elyot, for example, in *The Book of the Governor* (1531) was aiming at producing a scholar-gentleman who would add accomplishment to a foundation of classical scholarship. The whole intellectual climate of the Renaissance made a continuance, and, indeed, an extension, of classical culture necessary for the gentleman, and the tradition has persisted to our own day. But for Elyot and others like him in the sixteenth century it was necessary to combine with this modern languages, music, and athletic skill. Above all, the 'governor' was to be characterized by a sense of personal and social obligation derived from a highly idealized picture of an age of chivalry.

Such schemes remained unrealized, and the practical details that would have enabled them to affect educational practice are absent. On the Continent, it is true, courtly academies with a curriculum divided between literary

<sup>1</sup> Cambridge University Press, 1948.

studies and polite accomplishments flourished for a time. But in England the nearest approach was the scheme of Sir Humphrey Gilbert for the creation of an academy where youths were to study "matters of action meet for present practice both of peace and war."

Its pupils were to join at the age of twelve: they were to have a schoolmaster for Latin and Greek and readers for logic and rhetoric; but more especially they were to have professors (much more highly remunerated) of political philosophy, applied mathematics, civil and common law, divinity, and medicine. There were also to be teachers of modern languages; teachers of horsemanship, fencing, and dancing; a teacher of instrumental music, and a teacher of heraldry.<sup>1</sup>

The most famous of the post-Renaissance critics of education were Milton and Locke, and they anticipate the truths and errors of later and lesser writers. Both were concerned with the necessity for a synthesis to produce a Renaissance gentleman rather than a medieval clerk by infusing into the academic education of the grammar school some of the practical and æsthetic training that had characterized the education of the knight, though by Locke's time the man of the world had become a man of business rather than of chivalry. Milton (who wrote his tract on education in 1644) accomplishes his object in the main by a simple addition to the subjects to be learnt, forgetting, as so many reformers forget, both the limitations of the child and the number of hours in the day. He is not friendly to the courtly academies, "the Monsieurs of Paris who take our hopeful Youth into their slight and prodigal custodies and send them back again transformed

<sup>1</sup> Sir Ernest Barker: *Traditions of Civility*.

into Mimicks, Apes, and Kicsshoes." Nor is he prepared to make anything but the highest claim for classical learning. The list of classical authors to be studied by the boys and young men who are to inhabit his spacious academy is formidable, if not fantastic. But his emphasis is different from much contemporary practice. He rejects purely linguistic exercises:

Language is but the instrument conveying to us things useful to be known. And though a Linguist should pride himself to have all the Tongues that Babel cleft the world into, yet if he have not studied the solid things in them as well as the Words and Lexicons, he were nothing so much to be esteem'd a learned man, as any Yeoman or Tradesman competently wise in his Mother Dialect only.

He denounces as a waste of time the "preposterous exaction [of] forcing the empty wits of children to compose Theams, Verses, and Orations." The classics are to be valued for the wisdom on many subjects they uniquely embody. But it is impossible that a reform in the teaching of classics, however drastic, could leave time for all the other things that Milton's pupils must learn if they are to accomplish his ideal of a "compleat and generous education which fits a man to perform justly, skilfully, and magnanimously all the offices both of Peace and War." For these included not only all branches of mathematics and natural philosophy, but geography, architecture, and fortification; not only ethics and politics, but medicine and law. Their intellectual and moral pursuits are to be accompanied also by a very full athletic training.

It is obvious that Milton's programme of reform was not a practical one, though it contains suggestions and

principles of great interest and value. Locke (his *Thoughts concerning Education* was published in 1692) is much more close to the possible, and was characterized by the practical good sense of his class and age. A private tutor he regards as the only satisfactory means of education; the public school (by which he meant the grammar school) he rejects both on grounds of morality and by reason of the antiquated character of its curriculum.

Latin and learning make all the Noise; and the main stress is laid upon his Proficiency in Things a great Part whereof belong not to a Gentleman's calling; which is to have the knowledge of the man of Business, a Carriage suitable to his Rank, and to be eminent and useful in his country according to his station.

As it is, he says, "Our education fits rather for the University than the world." The criteria by which he judges education are its moral tone, its training for life in society, and the relevance that its content should have for the needs of everyday affairs.

. . . Children's Time should be spent in acquiring what might be useful to them when they come to be Men; . . . Most Time and Application is to be bestowed on what is like to be of greatest consequence and frequentest Use in the ordinary Course and Occurrences of that Life the young Man is designed for.

Accordingly he will teach his pupil English—on which he lays great emphasis—French, Latin (both languages by the direct method), Arithmetic, Geography, History, but not Greek.

Could it be believed, unless we had everywhere amongst us Examples of it, that a child should be forced to learn

the Rudiments of a Language which he is never to use in the Course of the Life that he is designed to, and neglect all the while the writing of a good Hand and casting Accounts, which are of great Advantage in all conditions of Life, and to most Trades an indispensable necessary?

He is doubtful of natural philosophy as being still too vague and speculative a subject. But every young gentleman should learn a trade, in spite of the fact that his parents might be "frighted with the disgraceful names of Mechanik and Trade."

Much of this is familiar enough to modern readers. It is particularly interesting to find Locke prepared to throw over one of the principal new emphases of the Renaissance, that on the study of Greek, to find room for more useful subjects. The division between the 'academic' and the 'useful,' between the classroom and the 'real' world, is more clearly stated by Locke than ever before, and it is a reflection on the schools and universities of his time that he had ample justification for making such an ultimately misleading distinction, apart from that of his personal philosophy which lay behind it. The Whig gentleman for whom Locke is devising an education was, indeed, living in a world for which his school did too little to prepare him. A diplomat in a world where diplomacy involved relationships between nation-states, a soldier in an age of scientific fortification, a merchant with contacts in America or India, a scholar in the intellectual climate of Newton and Boyle—the English gentleman whom Locke desired to produce apparently needed a totally reformed education. Yet in face of all these weighty criticisms the grammar-school curriculum remained unchanged. Throughout the seventeenth and eighteenth

centuries the content of education remained very largely what it had been in the Middle Ages, and what, indeed, Quintilian had said that it should be in the first century. It is not altogether easy to find precise reasons for this failure in adaptation. Matthew Arnold found such a reason in the orthodoxy of a national Church out of touch with the great cultural movements of the time.

Perhaps one reason why in England our schools have not the life and growth of the schools of Germany and Holland is to be found in the separation with us of the power of the Reformation and the power of the Renaissance. With us, too, the Reformation triumphed and got possession of our schools: but our leading reformers were not at the same time, like those of Germany, the nation's leading spirits in intellect and culture. In Germany the best spirits of the nation were then the reformers. In England our best spirits—Shakespeare, Bacon, Spenser—were men of the Renaissance, not men of the Reformation, and our reformers were men of the second order. The Reformation, therefore, getting hold of the schools in England was a very different force, a force far inferior in light, resources, and prospects, to the Reformation getting hold of the schools in Germany.

Arnold's distinction may seem an artificial one, and perhaps sprang from his over-great reverence for German education. But it is interesting in that it reminds us how complex are the forces that shape the content of education. And, in criticizing English education in the centuries following the Reformation, it is, indeed, as well to remind ourselves how difficult it is to produce a new synthesis in the curriculum. The most important limiting factors are the outlook and capacities of the teachers. Educated themselves in a certain mould, it is too difficult a task for

most of them to bring to their work a complete freshness of outlook. New techniques must be devised and new subjects learned before they can be taught. Educational change must in general be slow, because the teachers are, after all, the pupils of the previous generation. Thus in the seventeenth century it was easy to propose a scheme for the establishment of a school specializing in natural science, during the period of great interest in these studies that saw the foundation of the Royal Society in 1662, but it was impossible to put such a scheme into execution. Even the mathematical school founded as part of Christ's Hospital was a failure for lack of efficient teaching. We must not be too scornful of the educational efforts of the seventeenth and eighteenth centuries. The synthesis at which the Renaissance aimed is still essentially the central problem of our curriculum, though in terms which the centuries have altered. No one can believe that we have reached a satisfactory fusion of literary and scientific culture, for example. The problem of devising a general education that shall satisfy the need which Milton felt of combining academic, scientific, and moral elements is still before us.

Whatever the reasons we give for their failure to modify the content of their education, that failure was one of the factors that brought about a marked decline in the grammar schools and universities in the eighteenth century. For not only was their curriculum formal and unchanging, but their moral tone was low, their standard of teaching deplorable, and many of their masters were the boorish holders of what were, in effect, sinecures. Yet it is one of the paradoxes of educational history that the century during which the schools were in this condition

should have produced a succession of men with genius, scholarship, and originality, many of whom, like Fielding, despised the schools that had produced them. This very success was probably another factor working against change. But it does remind us of the saving grace of their curriculum. Narrow and inadequate though it was, it nevertheless made the exceptionally gifted individual free of great literatures. Gibbon writes thus of his own brief schooldays at Westminster:

Our seminaries of learning do not exactly correspond with the precept of a Spartan King, "that the child should be instructed in the arts which will be useful to the man," since a finished scholar may emerge from the head of Westminster or Eton in total ignorance of the business and conversation of English gentlemen in the latter end of the eighteenth century. But these schools may assume the merit of teaching all that they pretend to teach, the Latin and Greek languages: they deposit in the hands of a disciple the keys of two valuable chests; nor can he complain if they are afterwards lost or neglected by his own fault.

And the very limitations of the classical curriculum left time after the mastering of the languages themselves for wide reading, if the will to read were there. Men who would have been outstanding in any age were not hampered by an education which, if it did nothing else, put Virgil and Sophocles into their hands. Nor at its best was it as remote from life as its critics maintained.

For the English statesman of the eighteenth century this [*i.e.*, classical] literature was specially important, because it was an education for politics and not only for the management of man's life [say J. L. and Barbara Hammond]; it

reflected the anxieties and the temptations of peoples struggling with problems closely resembling the problems of his own age. Chatham, like Cicero, saw the stolen treasure of the East corrupting the politics of his day; Fox and Burke, denouncing the misgovernment of India, spoke as pupils of Thucydides and the Greek tragedians, as men for whom history had rehearsed the scenes that moved before them, and inspired minds had interpreted their meaning. At the climax of the greatest of the speeches by which he charmed the senses of the House of Commons, the younger Pitt turned to the stately music of Virgil's hexameters as naturally as Bright would have turned to the solemn cadences of the Psalms. For it was from the classics that men of liberal temper derived their public spirit, their sense of tolerance, their dread of arbitrary authority, the power to think of their nation in great emergencies as answering nobly or basely to some tremendous summons.

When we consider the criticisms of the curriculum of the seventeenth and eighteenth centuries we must always remember that it could, however rarely and however imperfectly, produce results such as these.

The nearest approach to the reformed curriculum that Locke advocated was not made in some courtly academy but in the much more prosaic atmosphere of nonconformity. Excluded from many of the schools and from the universities, the dissenting bodies created their own schools, particularly during the eighteenth century. The Schism Act of 1708 sought to limit this practice by making it illegal for a dissenter to conduct a school where Latin was taught. The interesting effect of this ordinance was to broaden the curriculum of the dissenting academies, which in any case served families which, by reason of their association with trade, wished for a more realistic

education than that of the grammar schools. In the dissenting schools, which became a powerful element in English education, it was possible, therefore, to find, not only mathematics and geography, but modern languages and science being taught, and it was with such schools that men like Priestley and Dalton were associated, either as pupils or teachers. Priestley himself, who taught in an academy at Warrington, advocated in his published work the inclusion of English, mathematics, science, and French as part of the normal curriculum. But such broadening of the content of education as did take place in these academies (and it is easy to overestimate it) served mainly to associate the classics ever more firmly with respectability and with preparation for the life of a gentleman.

Concerning the content of elementary education in the eighteenth century it is necessary to say little. Such education was, in general, deplorable. Urbanization and a developing formalism in religion were among the causes of an alarming decline in moral standards. The novels of Defoe and Smollett are obvious witnesses to a condition of life that, particularly in the cities, was brutal, corrupt, and degraded. It was primarily this state of affairs that called into existence the charity school movement, which attempted to deal with a major social problem by direct moral teaching side by side with that of the bare essentials of literacy. Apart from these charity schools, primary education was in the hands of a variety of private schools of varying degrees of inefficiency. It is impossible to suppose that the education they provided had any content at all worthy of the name.

So constituted, the education of the country was totally

unfitted to meet the social and economic strains of industrialism. It is unnecessary here to indicate how great those strains were. Associated with an astonishingly rapid increase in population and with the dislocation of a major war, the early years of the nineteenth century saw the revolution in social life produced by the rapid transition from an agrarian to an industrial community, with all that this implied in the way of a new class-structure, of social unrest, and of new technical demands. It was inevitable that the nineteenth century should see a change that was revolutionary, even if all too slow, in the organization of our education, and the beginnings of a no less profound change in what it taught.

In the complex and confused prospect of English education in the nineteenth century, nothing stands out more prominently than the rise in prestige of the public schools. The very term 'public school' is almost an invention of the century, and certainly the process by which certain of the grammar schools became associated in the public mind with foundations such as Winchester and Eton, and by which there were many new creations on the same model as schools for the upper classes, was completely a nineteenth-century phenomenon. It was a process with very complex social causes which it is not the function of this essay to examine. We are concerned simply with the bearing of this growth of the public schools upon the content of education. It is much more than a popular legend that ascribes to Thomas Arnold so much of the credit for a revival in the education of a number of our greatest schools from 1840 onward. Such a revival did undoubtedly occur. But it is important to note that it did not involve any marked changes in the

curriculum. What Arnold did was not to change the formal content of education, but to show by a new seriousness of attitude and an unbounded belief in the vocation of the teacher that the traditional content could become the means of a new kind of teaching. He believed in the classics as an instrument in the hands of men full of a sense of the schoolmaster's pastoral function, by which a sense of moral purpose could be infused into English education. By raising their prestige, the schools were enabled to take advantage of a changed social environment and become the schools of the upper classes, and thus Arnold and his followers associated the classical curriculum more definitely than before with education for leadership.

The nineteenth century did actually see the hardening of class barriers in education in a way that was new. As late as the eighteenth century even the most famous schools had included a quite surprising breadth of social structure. With the nineteenth century the public schools, old and new, became quite definitely the preserve of the comparatively rich, and to have followed their curriculum was not only the sign of a certain level of education but the mark of a particular class. The distinction between a classical curriculum and any other was not based on any clear idea of what was suitable for boys of a given intelligence, but rather on what was appropriate to a certain social status.

If the thoughts of the new members of the upper middle class turned towards the academic education of the public school, the interests of the remainder were on the whole practical. Many of them wished for their sons successful careers in business, and regarded the classics as

an unsuitable training. It was pressure from such sources that tried to change the curriculum of the grammar schools. In some cases it was unsuccessful, as in the well-known case at Leeds where Lord Eldon ruled that the endowments of a grammar school could not be directed to modern subjects. At Harrow the dilemma was resolved by founding a quite separate modern school of lower social standing. At Manchester a modern school was founded as part of the main grammar school, and it was possible ultimately to develop this into a modern side of equal status and efficiency. In the case of many grammar schools the demands for a utilitarian education including such subjects as writing and book-keeping triumphed. But where it did so the prestige of the school declined, for the new curriculum was not a genuinely educational enterprise, related to a cultural tradition and leading to higher studies; it was simply a concession to the narrowest and most short-sighted commercial interests.

It was thus a deplorable state of affairs that was revealed by two Royal Commissions in 1864 and 1868. The first, the Clarendon Commission, was concerned with the few schools then called public schools: the second, the Taunton Commission, with the large number of endowed secondary schools of all grades. The former of these reports revealed an almost unmitigated narrowness in the curriculum of the best of English schools. The evidence in its pages merely confirms what we can read in every biography and every school history. Latin, Greek, divinity, a little mathematics—these for practical purposes constituted the entire curriculum. Other subjects—science, history, or modern languages—were generally unknown, or were given the cold hospitality of special lectures on

half-holidays or similar occasions. "Nothing could have been worse for the development of my mind," said Darwin, "than Dr Butler's school [Shrewsbury], as it was strictly classical, nothing else being taught, except a little ancient geography and history. The school as a means of education to me was simply a blank." Before the Clarendon Commission Faraday was asked whether he considered that scientific studies had been overlooked. His reply was, "As far as regards education, almost entirely." The general report of that commission said: "Natural Science, with such slight exceptions as have been noticed above, is practically excluded from the education of the higher classes in England. This exclusion is in our view a plain defect and a great practical evil." Dr Moberly, the headmaster of Winchester, in his evidence said:

In my judgment you cannot bring French in as a co-ordinate subject of instruction with the two chief subjects of education, classics or divinity, or even with the third, mathematics. We can neither find the time in the week nor the teachers;

and again:

It is plainly out of the question that we should *teach* chemistry.

Such evidence could be multiplied without limit. The narrowness of the curriculum was modified by the personal influence of individuals. Arnold himself, for example, was criticized for introducing some modern history and languages, and Temple at Rugby did something to broaden the curriculum, not only by beginning a little science-teaching, but by such experiments as teaching

his sixth form from de Tocqueville's *Democracy in America*. But such deviations merely emphasize the prevailing reluctance to modify a curriculum the inadequacy of which became increasingly serious. The error was not in the idea that the classics might be the core of education; it was in the view that they constituted the only possible core, and that they required no supplementation by other studies. The failure lay partly in the refusal to provide alternatives to a classical education for those for whom it was unsuitable, and partly in that the new demands of a changing world were met by no infusion of new knowledge.

The Taunton Commission of 1868 investigated the great body of secondary schools, and found conditions in some of them that to-day seem incredible. There were, of course, outstanding exceptions. A very few of the greatest grammar schools were giving a classical education quite equal in standard to any in England. Except in so far as they were beginning to feel their way tentatively to the inclusion of modern studies at a comparable level, their faults were those of the schools investigated by the Clarendon Commission. But the great majority of English secondary schools were either clinging to the incompetent teaching of Latin or to the no less incompetent provision of courses in English, geography, mensuration, or book-keeping. By any interpretation of their function they were miserably inadequate. Yet the evils that were present in the middle years of the century persisted almost without change until its end.

It has been said that the most socially ambitious members of the new middle class did not desire a 'modern' education for their sons. In the literature of the nineteenth

century there are abundant examples of their anxiety for their children to undergo the 'useless' discipline of the classics. Tom Tulliver (in *The Mill on the Floss*) wrestling with a linguistic routine that he hated, or Dr Blimber's academy to which little Dombey went, bears witness to a common result of social ambition in the new moneyed class. Not only was it from this class that most of the new public schools of reasonable efficiency were recruited, but it was its wishes that fastened a particularly barren, because badly taught, classical curriculum on many private schools. The unfortunate effect of the social changes of the nineteenth century upon the grammar-school curriculum was, therefore, that classical studies, instead of adapting themselves to new social and cultural needs, became identified with the education of a class; their supposed 'uselessness,' instead of being a charge against them to be disproved by their defenders, became the very quality that had to be magnified as being the actual sign of their part in the education of 'gentlemen' who could afford a perfectly useless education for their sons. A 'modern' curriculum developed, associated with lower social prestige, prized only for its early financial reward and immediate usefulness, and lacking any connexion with the universities, and hence without proper standards of achievement. An academic education was valued by many of its patrons in the same way that they valued the stained glass or architectural monstrosities with which they made their houses hideous: as a sign that they were able to spend their money ostentatiously and with the conspicuous waste that Veblen has analysed. The greatest evil that arises from this attitude is that when good things are valued for the wrong reasons, they themselves fall

into disrepute, and this factor is undoubtedly present in contemporary attacks upon academic standards.

A condition in which the secondary schools of England were either unwilling to change themselves, or manifestly incompetent to do so, could not go unchallenged. It was examined by Matthew Arnold in the light of the deepest needs of national culture. It was attacked on a narrower front and with greater immediate success by scientists such as Huxley and Spencer. Their case was overwhelming. The triumphs of science were obvious enough. England was the richest country in the world by reason of her powers of invention and discovery. The Exhibition of 1851 revealed the prospect of a brave new world waiting for exploration: if we were to maintain our pre-eminence no time must be lost in reforming our education to meet our scientific needs. Nor was it only in commerce and technology that the Age of Science was felt to have come; a revolution in ideas was no less obviously occurring. Yet at every level of our society the reformers could point to the same ignorance of science as characterized the highest ranks. The mechanics' institutes founded at various times during the first half of the century had revealed by their comparative failure that any understanding of scientific principles must rest upon a sound elementary education. But, in addition to providing such an education, some more immediate steps were necessary. From 1859 State support was given to science 'schools' (*i.e.*, the science departments of existing schools) on condition that they devoted not less than three-quarters of their time to science. The contrast with the modern attitude, which attempts to limit the time spent on specialist subjects, is striking. In 1884 a Royal Commission recommended the

creation of technical colleges closely related to local needs, in which the education was specifically limited by severely technical considerations. There was a separation here between scientific and cultural education that was full of menace for the future. It extended to the new universities, and when Mason College, that was afterwards to be the University of Birmingham, was founded in 1870, its declared object was

to promote thorough, systematic education and instruction adapted to the practical, mechanical, and artistic requirements of the manufacturers and industrial pursuits of the Midland District . . . to the exclusion of mere literary education and instruction, and of all teaching of theology.

In signs such as these of a new emphasis on science we see also the clear antithesis that was created between a purely cultural education that is almost forced to glory in its uselessness and an education of lower prestige concerned with socially important studies but almost entirely separated from the great traditions of learning. It is almost inevitable that, faced with the challenge of the new scientific knowledge, Newman should lend his superb writing to a defence of the view that the function of the university was to enshrine useless knowledge; inevitable, too, as scientific studies edged their way through the reluctant doors of university and public school, that they should be forced to dissociate themselves from any social responsibility by proclaiming their own purity and even their own uselessness. Against the heritage of such disastrous separations, complicated by the irrelevant factors of social prestige, all subsequent attempts to achieve a rational curriculum have had to strive.

If we turn from secondary to primary education and

ask what its content was in the nineteenth century, a sufficient answer is very shortly given. The immense social changes of the industrial revolution, particularly the creation of a large urban working class and the great increase in population that accompanied it, demonstrated as nothing else could the utter inadequacy of what elementary education had existed. The result, of course, was seen in the widespread illiteracy of the first three-quarters of the century. The churches attempted to overcome the problem. Their efforts were subsidized by the State from 1833 onward, at first by the most trifling dole, but in increasing amount as the significance of the problem became more plain, and the need for a literate working class became more widely realized on every ground, economic, political, philanthropic, and prudential alike. Finally in 1870 the State was obliged to take a major part in the responsibility that no other force within society was now strong enough to bear.

It is unnecessary for us to describe the controversies and the efforts of those years. Under those difficulties and in that environment the education of the poor could obviously attempt no more than to instil the essentials of literacy, and it was often miraculous if even that was done. There were schools, even in the early years of this century, which attempted to teach geography or nature study. But they were not common, and in general primary education was not encouraged to teach subjects other than reading, writing, and arithmetic, with one exception. The church schools were obviously under an obligation to provide religious teaching. Such teaching was not obligatory under the school boards set up in 1870, but in fact was usually given, though necessarily in an undenominational

form. Whenever primary education was given in the nineteenth century it made some effort, however perfunctory or jejune, to include in its content some moral or spiritual element.

It is impossible to exaggerate the importance of the Education Act of 1902. Quite apart from the revolution it accomplished in administration and the change it effected in elementary education, the greatest of its provisions, and the ones that affected the content of education most immediately, were those that made possible a national system of secondary education, creating new schools and reorganizing older foundations. The insight of Sir Robert Morant, an insight that has still received far too little recognition, appreciated that a vast expansion and a radical reform of the grammar schools was necessary if England was to maintain her economic position, if schemes of social reform, not least in education itself, were to be carried through, and if democracy was to be a stable form of government producing its own educated leadership.

What was to be the character of the education in the new grammar schools? It had to satisfy the economic needs of the country and the prejudices and the aspirations of the classes which it was to serve. But it had also to be related to the traditional education of the best and oldest schools; it could not merely provide a 'modern' education of low prestige, but had also to give the most intelligent children of all classes access to the culture represented by the best of the public and grammar schools and by the universities. Morant has been blamed for fastening over-academic shackles upon the new schools. But if the products of those schools were to have any chance in the

future of taking their places in the universities and beyond, side by side with boys from Winchester or Rugby or the greatest grammar schools, the education they gave must not be too widely removed in content from the tradition of the public schools. Hence, when in 1904 grant regulations for secondary schools were laid down, a curriculum was prescribed consisting of English language and literature, one language other than English, mathematics, science, drawing, manual work, physical training, and housecraft for girls, but "when two languages other than English are taken and Latin is not one of them, the Board will require to be satisfied that the omission of Latin is for the advantage of the school." This regulation does not show an over-conservative attitude to the curriculum of new schools; it shows a genuine realization of the way in which the children in those schools might be given something like equality of opportunity with those in the public schools.

There was, of course, a danger that this academic curriculum might be forced upon children unsuited for it. The danger has been realized, and with unfortunate results. The risk of the imitation of a kind of education with a higher social prestige is a grave one; it is certainly present to-day. There are those who would avoid it by having the same curriculum and the same school for all children, but the evils of this, which we shall analyse in more detail at a later stage, are far greater than those involved in trying to fit the education to the abilities of the child, which was what Morant was attempting to do. If he had not seized the opportunity of putting an academic curriculum within the reach of large numbers of those able to enjoy it, the economic and social results for

the nation would have been no less disastrous than for the individuals who would thus have been culturally disinherited.

The adaptation to social and economic pressure that the nineteenth century was so reluctant to bring about in the content of its education has come in the twentieth in no uncertain way. Those famous public schools that are often so wrongly assumed to be intellectually conservative have now developed science sides and modern sides, often far outnumbering those who remain faithful to the classics. Their curriculum differs from that of the new grammar schools only in that there is usually a greater choice of subjects, and in that classical studies have been more generally retained, even if the number of those taking them to a high level has fallen. The newer grammar schools have not usually developed classical studies far, so that Greek is rarely found in a county school. But the broadening of the curriculum has not been obtained without cost. The content of the education that Arnold gave was too circumscribed, but it had merits. It was possible for one man to teach it almost in its entirety, and a boy could therefore have a long and intimate contact with a scholarly mind. It was possible for him to realize the unity of knowledge, to see relationships established between different aspects of thought, and it was probable that he would have time to read widely for himself.

The content of our modern education is in danger of showing no unity at all; it is too often the scarred and broken battleground of rival specialists. To Arnold the advertisement pages of the educational journals would have been incomprehensible. In place of the three things that he asked of a schoolmaster—that he should be a

Christian, a gentleman, and a scholar—he would find demands for a physics specialist, a geography specialist, and even a divinity specialist. We must not be too scornful of the change; it represents a gain in efficiency; it is a sign of a quite inevitable adaptation to a new world. But the danger is implicit of producing people whose minds are full of items of unrelated knowledge, and who may have omitted altogether any contact with certain aspects of experience which might have been of value to them.

The changes that have occurred have been responses to irresistible, because perfectly rational, arguments. It is inconceivable that in the twentieth century any of our schools should be without adequate provision for the teaching of science; it is probably necessary that every child should learn some science. There is no answer to that demand but to build science blocks and to include science in all time-tables. It *was* indefensible that French or German should have been taught by visiting teachers of lower status than the ordinary staff; their position as equal partners in education has rightly been recognized. But if French or German, why not Spanish, a language that is, after all, of immense commercial importance and the common language of a vast sub-continent? And if Spanish, then surely Russian has a claim, and the Ministry duly urges upon the schools the desirability of some provision for Russian teaching. The schools live in dread of the day when some enlightened educationist will realize what a large proportion of the world's population speak one or other variety of Chinese. In the same way it is not enough for history to be taught in schools (assuming that the arguments are met of those who now maintain that history demands too much maturity for it

to be taught in schools at all); the legitimate claims of European and Imperial and American history can scarcely be overlooked. We are here, in fact, at grips with the problem that Milton solved by a complete disregard of possible curricula, and which even Plato scarcely envisaged in an education lasting until late middle age. It is quite simply the problem that there is so much that may plausibly be considered desirable for an educated person to know that we have no time to teach it, less still to teach any of it well, unless we are prepared to be quite ruthless in our omissions.

In the fierce competition among rival subjects for time in the curriculum and interest in the mind of the child, a stabilizing influence has been the external examinations of university and professional bodies. The prevalent belief that the universities bind the schools in chains in the interests of a small group of university entrants is almost entirely unfounded. The examining bodies, on which the schools as well as the universities are represented, have conducted examinations in which a certain standard in certain specific subjects has been demanded if the certificate is to be a means of entrance to a university. Such regulations, which have actually been increasingly relaxed, have, it is true, affected the curriculum of schools, but the influence has not been inconsistent with what the schools have themselves regarded as the legitimate requirements of a general education. There are exceptions, of course. The older universities still require Latin from all their entrants. It represents the last link with the uniform classicism of the recent past. But its passing will be unregretted, not because it is a relic of an outworn culture, but because the required standard represents no culture of

any kind. In general, however, the external examinations of university bodies have done much to preserve some conception of a general education in a time of very great pressure upon the curriculum. To this point it will be necessary to return.

The claim of apparently valuable new studies for inclusion in the content of education has not been confined to the grammar schools. It exists in the universities, though in a different form. There the demand is not so much to include a variety of subjects in the curriculum of one student, since at the university level a considerable degree of specialization has hitherto been accepted. The problem is rather to decide whether the university should provide courses in certain subjects at all. The process that led to the creation of chairs of chemistry in the nineteenth century has produced professors of petroleum technology and of brewing in the twentieth. The demands that higher learning should be related to life have subsidized readers in public administration and lectureships in accountancy. Is there, one is forced to ask, any legitimate end to this process; are there any firm principles on which such new creations may be questioned, or are we bound in consistency to move forward to that American consummation of an education in harmony with its social environment, a chair of cosmetology? The question as to what distinguishes such a professorship from, say, one in classical archæology, beyond the greater relevance of its subject matter to modern problems, is one of the most interesting and important in contemporary education, and we shall have to attempt its answer in the next chapter.

The curriculum of the 'elementary' schools has not undergone the same changes as that of the grammar

schools in the last forty years. It is only quite recently that doubts have been cast on the desirability of regarding reading, writing, and elementary arithmetic as absolutely necessary accomplishments for the majority of children of eleven. The changes that have occurred have been in attitude and technique rather than in actual content, and though much else beside the three R's has been taught in what are now the primary schools, history, geography, and practical work all having found a place, the main pre-occupation of these schools has been to ensure, in my opinion rightly, that whatever the difficulties of swollen classes and deplorable buildings the children who leave them shall have these primary skills.

With the new conception of secondary education that follows from the Butler Act, however, new problems arise, and it is necessary to ask ourselves whether we know what the content of education should be for the great majority of children between the ages of eleven and fifteen, or for the part-time education of boys and girls from fifteen to eighteen. Some partial answers have been made to these questions in the upper classes of the old elementary schools and in senior and central schools. Experiments, often of the greatest value, have been carried out in the teaching of English, history, civics, science, and practical subjects to such children. But here again attention has been directed towards technique rather than content. It is, at any rate, doubtful whether it is possible to lay down for the new secondary schools more than the merest outlines of a curriculum. It would certainly not be wise to do so, for the most certain thing about such education is that it must be the object of ceaseless experiment by the teachers concerned.

Only by such experiment can the new schools hope to undertake their responsibilities. It is necessary that we should remind ourselves constantly exactly how great those responsibilities are; they are no less than the education of a democracy. We have embarked upon what is at once the most difficult, as it is the most worthy, of all forms of government, and one which proved beyond the political capacity of the most gifted of all peoples, the Greeks. It is a growing realization of the burden thrust upon the education of the ordinary person by the central assumption of democracy that he is entitled to a share in his own government which makes the bare bones of literacy seem so inadequate, and removes a universal secondary education from the sphere of luxury to that of political and social necessity.

But the nature of that education remains obscure. For the requirements of democratic citizenship go far beyond the central assumption that every individual is entitled to a share in his own government by exercising his vote. It entails qualities of self-discipline, of knowledge and interest, and of willingness to take up the burden of disinterested participation in local government so long sustained by a small class. The inculcation of the information and attitudes necessary to make democracy a reality raises a number of very difficult educational questions. Are we to attempt an answer by the direct teaching of civics? Is the best way of producing responsible citizens to run our schools as democratic communities? Or can we rely on social wisdom being produced by more traditional organization and as a by-product of more traditional subjects? The answers to these questions remain obscure. All we can be sure of is that there must be many and

varied experiments in this field and that they must always bear in mind the varied endowments of individuals. Above all we must concern ourselves in the first place with the general principles that should direct our experiments in what is still a very largely unexplored subject.

It is, indeed, a consideration of first principles that is required in every field of education. We have to deal with a secondary education whose content is either still to be created or is in danger of falling into a chaos of unrelated fragments. Above it we have universities that are enlarging in a haphazard if drastic way the scope of what have hitherto been considered university studies. The content of this education has to provide the intellectual and moral equipment for men and women confronted with the problems of revolutionary changes in social, economic, and spiritual life. Only by the most careful examination can we hope to develop an education whose content can match its obligations.

## II

### SOME GENERAL PRINCIPLES

WE HAVE HITHERTO sketched the background of the present difficulties concerning the content of education, and we have said a little of the social forces which have moulded the curriculum that we know. Though it is necessary to keep this historical perspective in our minds, if for no other reason than to emphasize the organic nature of education, we can approach the problem of content from a different angle by discussing the possible justification for including the study of a subject in our education.

There will probably be fairly general agreement that we may seek that justification under one of three broad heads. A study may convey information which is essential to the business of living; it may inculcate valuable skills; and, thirdly, it may contribute to the spiritual development of the individual, using the word 'spiritual' to include the satisfaction of the highest intellectual, moral, and æsthetic capacities. It is probably necessary to meet certain immediate objections to this classification before we go on to discuss some of its implications, and to clarify by examples some of its ambiguities, as, for example, the meaning of 'valuable skills.' Some will object to the idea of 'subjects' at all. They will feel that, since greater unity is what our education most urgently needs, we

should not think in terms of a division into sharply separated compartments. But, although it is true that for many purposes it may be valuable to consider a unity of knowledge that shall comprise simple arithmetic, French verbs, and Greek drama as common elements, for practical purposes it is convenient and necessary to deal separately with the claims of the members of so heterogeneous a group.

A more weighty objection is the impossibility of assigning the contribution of a given study to a definite category in this way. It may be held that from the simplest process some value at the 'spiritual' level is probably obtained, if only that intellectual stimulus so often referred to with doubtful validity as 'training the mind.' This is, of course, true, and suggests a most important conclusion. Ideally a subject should make a contribution at all three levels. In the Middle Ages, for example, the study of Latin not only gave essential information and a necessary skill; it most definitely opened the way to a variety of intellectual and spiritual experiences. In our own education, English affords the most obvious example of a study which is valuable at every level. But if a subject is to make the full contribution of which it is capable, certain conditions must be observed; they are so obvious that one would not mention them were they not so often overlooked. First, the subject must be taught in the right way, and with all the possible ends in view. For example, it is all too easy to teach science in such a way that its value is restricted to a series of more or less interesting facts, such as that litmus turns red with acids, or to the acquisition of such skills as the ability to change a fuse. It was largely because they could imagine no other value emerging from

the teaching of science that so many nineteenth-century schoolmasters regarded it as not worth doing; and, given their premisses, they were right. It is possible, however, to teach science so that its social results and its relationship to the development of human thought are made clear. But if these admittedly difficult objectives, and others like them, are to be reached they must be always present in the teacher's mind, or he will fall back into the simpler routines of purely factual teaching. Further, a subject can only make its fullest contribution if it is taught to the right pupils and at the appropriate stage. As examples of the widespread neglect of this truism, we may cite the hundreds of little boys, many of them not especially gifted, who are taught Latin from the age of eight. It is more than doubtful if they are all capable of benefiting from such a study. Nor is Latin, with a literature appealing almost entirely to adult minds, probably defensible at all as a subject for those children who will discontinue it at fifteen or sixteen.

Without entering upon this argument, it is clear, however, that with these considerations in mind much more careful thought needs to be given to the presentation of a subject, having regard to the precise ends we intend to attain by its study.

If ideally some subjects can make contributions at all three levels, in practice we associate some studies more particularly with one or other of them. Even about basic information, however, there is now a considerable amount of controversy. As a reaction against the admittedly pedestrian methods by which generations of unwilling children have been drilled into literacy, there is to-day a tendency to discount the value of acquiring information as

a part of education. In place of what is learned, the process of learning itself is the centre of interest for many educationists. The word 'activity' has become the symbol of a new orthodoxy, and the three R's are now dethroned from their primacy in the content of education. This tendency is in many ways a justifiable one. It represents a necessary attempt to bring out the spiritual value of even the simplest processes, and it is true that we need to consider learning as a more active and less purely receptive process than we have sometimes done. But the new emphasis is dangerous in certain ways, particularly if it comes to be regarded as the only legitimate educational ideal. It may conceal beneath a façade of psychological justification a distrust of the intellectual approach, the misology of which Plato speaks, for it seems to ignore the fact that listening, reading, and thinking are no less 'active' than other pursuits more obviously so. But the danger of this emphasis on activity is that it may obscure the absolute necessity of a certain body of facts and skills for every child who can acquire them. It is easy to deride the three R's, yet there is no evading the plain truth that without the ability to read, write, and count any talk of citizenship or democracy becomes nonsensical. It is when we have agreed this, that questions of technique become of great importance. It may well be that in the hands of some teachers what are called 'activity' methods may be the most effective for teaching literacy or anything else. Their counterpart—*i.e.*, teaching by means of 'research' problems—certainly produces admirable results with very able older children. Certainly I would not for a moment wish to question their interest or their importance. But I would contend that one of the standards by which they

must be judged is their effectiveness in producing literate scholars.

There is, in fact, an admittedly ill-defined body of knowledge that we feel we have a right to expect from an individual of a certain age and a certain intelligence. Too often those who demand the inculcation of attitudes rather than facts—the attitude of willingness to find out for oneself, to think logically, and so on—fail to realize both how difficult is the development of such attitudes, and also what a firm foundation of elementary factual knowledge they assume. The clearer definition of this minimum equipment of facts and skills for people of varying capacity forms one of our most difficult and interesting educational tasks. It is far more difficult to-day than it has ever been, because the field of knowledge has expanded so greatly in the last century, and we are uncertain how much of this new knowledge must be included in the minimum equipment of that abstraction called ‘the educated man.’

If we consider only that minority who leave grammar schools to enter the university, we are certain that they should be acquainted with a certain body of facts about English literature, but far less certain that there is any similar minimum of scientific knowledge without which they incur the charge of being ‘uneducated,’ and at this point it must again be agreed that while what we really want is a ‘love of literature’ or ‘the scientific attitude’ these qualities must rest upon a foundation of actual knowledge. At the level of which we are now thinking we are definite that a boy or girl should know who was the author of *Hamlet* or of *Lycidas*, but less sure concerning the Quantum Theory, or *East Coker*. The majority of our universities insist that among the basic skills possessed by

their entrants shall be a certain ability to handle a foreign language, but there is less agreement as to the necessity for one particular language, Latin. We move away at this point from the level of facts and skills to that of the higher intellectual and spiritual qualities of particular subjects, which we must discuss in greater detail. But we must never lose sight, as we so often tend to do, of the almost unconscious assumption that we must of necessity make of a minimum of essential knowledge appropriate to different ages and levels of intelligence.

If we are far from clear about the value of the contribution that some subjects can make at the primary stages of fact and skill, we are in much greater confusion when we turn to their justification at the higher levels of intellectual, moral, and æsthetic experience. The question, "What right has this subject to a place in an over-crowded education?" is simple enough in the case of a study such as English, which is manifestly justified at every level. It becomes much more difficult when we consider one that has little or no value from the standpoint of the information that it imparts, but which may be claimed to have special value for spiritual development. There is probably no better example of such a subject than Greek. We are almost forced to admit that this is a study that contributes practically nothing to the equipment of a person as regards the information or the skills that it imparts—for the arguments based on the value of translation from a foreign language cannot be used with any very great conviction in favour of Greek rather than other more 'useful' languages. But in my opinion it is right to contend that in Greek language and literature we have possibilities of spiritual illumination that overwhelmingly justify its inclusion as

part of the education of certain individuals. The philosophical genius of Plato, the political wisdom of Aristotle, the emotional insight of Æschylus or Homer, altogether outweigh the arguments that show its 'uselessness' at the more superficial levels.

If you ask of education that it should teach how man has tried to make societies, how far his experiments have succeeded, from what causes they have come to catastrophe, the study of the life and literature of Greece and Rome is an experience possessing a completeness that no other culture can provide: it is like contemplating a vast tragedy on which the curtain has dropt.

These are the words of two brilliant historians (J. L. and Barbara Hammond) who cannot be accused of holding reactionary views. It would be absurd to say, of course, that every child, or even every very clever child, should be forced to learn Greek. The unique experience which the passage I have quoted above claims for classical studies is denied to the majority by simple lack of natural gifts. But it follows that an education is incomplete and unsatisfactory that does not attempt the immensely difficult task of giving to all children, in forms appropriate to their gifts, something of the same *kind* of experience that Greek gives to a few fortunately endowed by nature and inclination. It means, also, that we must so organize our higher education that Greek can find a place in it, for if we agree that its contribution at the deepest level is unique, then any argument that dismisses it as academic or irrelevant to modern needs is superficial and misguided, and an organization of secondary education that makes it impossible for a suitable child to enjoy it is a plain denial of equality of opportunity. The objection that the classics

are now available in translation is perhaps too naïve to require an answer. The work of translation must be done afresh for succeeding generations, and to produce Cornford's *Republic* or Day Lewis's *Georgics* requires a background of profound and active scholarship. It is of great importance that the defence of a subject like Greek should be made quite explicitly in terms of its unique spiritual value. Nothing has done more harm to academic studies than the absurd efforts to justify them by reference to superficial usefulness. The arguments that the classics are necessary for the writing of good English, that a knowledge of the vocabulary is useful in botany or medicine, even that Latin is helpful in deciphering tombstones, have all been advanced with others of the same standard, even in quite recent controversy. At their best, some of these arguments rest upon a very dubious faith in the transfer of skills; at their worst they make one wonder whether their authors have ever understood the real value of what they seek to defend.

It is in the light of such considerations as we have here applied to Greek that the whole question of 'academic' subjects must be discussed. The word 'academic' has become almost a term of abuse in contemporary educational writing, and the reasons why it should have done so form an interesting study. The most extreme critics of the academic see in it the product of an aristocratic culture. The division which, in the *Phaedo* and elsewhere, Plato draws between pure knowledge and knowledge that is degraded and contaminated by its relation with the physical world is for them the result of a society resting upon a basis of slavery, and is the origin of a barrier between learning and technology which has introduced a disastrous

division into our education. Newman may be considered as one of the greatest defenders of such a division, for it was he who stated quite explicitly that the kind of knowledge most worth having was an end in itself, needing no other justification of usefulness, and hence he gave currency to the view that the university is a place for the pursuit of useless studies. A recent exponent of the extreme form of this view was Professor Hardy, who in *A Mathematician's Apology* was at pains to point out that the real attraction of pure mathematics, of which he was one of the greatest masters, was its complete uselessness.

But the climate of opinion has changed. Modern writers on these problems, such as Professors Bernal and Hogben, not only narrow the gap between pure and applied knowledge; they judge the importance of knowledge by its applications. They seize upon the fact that, since classical studies, for example, were of vocational importance in the Middle Ages, they can claim no superior virtue to other vocational studies, and, their vocational justification having disappeared, the subjects themselves can be removed from the content of education without loss of any kind.

There is thus a double attack on academic studies, the first political, the second utilitarian. It is true, of course, that 'academic' or 'liberal' studies have been associated with an aristocratic culture. It is possible to find numerous quotations from classical authors which show that some subjects are suitable for the study of free men and others for slaves, and that these latter are of a technical character. But it is surely a mistake to transfer our hatred of a social order to the kind of studies that it encouraged. An academic education may be valuable enough in itself, whatever the associations it may have had, in the minds of

Aristotle and Cicero, with a certain social order. Further, we must remember that it was on philosophical, not social, grounds that Plato, the greatest exponent of the superiority of abstract studies, regarded them as more valuable than others. He distrusted knowledge obtained through the senses, whether they were the senses of slaves or of free men.

What, again, shall we say of the actual acquirement of wisdom?—is the body, if invited to share in the inquiry, a hinderer or a helper? I mean to say, have sight and hearing any truth in them? Are they not, as the poets are always telling us, inaccurate witnesses? And yet, if even they are inaccurate and indistinct, what is to be said of the other senses?—for you will allow that they are the best of them?

Certainly, he replied.

Then, when does the soul attain truth?—for in attempting to consider anything in company with the body she is obviously deceived.

True.

Then must not true existence be revealed to her in thought, if at all?

Yes.

And thought is best when the mind is gathered into herself and none of these things trouble her—neither sounds nor sights nor pain nor any pleasure,—when she takes leave of the body, and has as little as possible to do with it, when she has no bodily sense or desire, but is aspiring after true being?

Certainly.

And in this the philosopher dishonours the body; his soul runs away from his body and desires to be alone and by herself?

That is true.<sup>1</sup>

<sup>1</sup> Plato: *Phaedo* (Sir Richard Livingstone's translation).

The Marxist will, of course, explain Plato's distrust of the 'real' world and of practical activities as simply a product of the class-structure of his society. But even if this is true, it merely gives an account of the origin of his ideas; it does not necessarily mean that they are wrong. It is certainly possible to question Plato's attitude to empirical knowledge and the material world—an attitude, incidentally, that he shares with many thinkers, including Christian ones—yet still agree that the supreme value which he ascribes to intellectual activity may be right. In any case, it is surely a most dangerous error to reject ideas simply because in the past they have been defended for wrong reasons. Although academic studies may have received support from interpretations of the world which we now in part reject, or from views of society that we now deplore, it is surely our task to consider their merits apart from these associations, and if they are good, to make them accessible to all who can profit from them, in an age when men are free. Nor must it be forgotten that without them we could neither defend the idea of freedom, nor hope to demonstrate his errors, if, indeed, Plato was wrong.

Though we must recognize that the rejection of the academic may have its origin in a materialism that regards the world of material objects as more real than any other, we must also meet the challenge of a more superficial utilitarianism. The view that the only value of a subject lies in its immediate usefulness or in its 'relatedness to life' is often reinforced by the sentimental regard for 'practical' activities of those who have never done any. But its chief danger lies in the muddled thinking, characteristic of so much educational writing, that is incapable of making a clear analysis of what is meant by such

a phrase as 'relatedness to life.' We can meet these arguments on their own ground if we abandon the folly of defending subjects because they are useless, a position that Plato himself never took up. It cannot be too often stated that academic studies are supremely useful, however that fact may have been obscured in the past by dreary teaching and bad arguments. Æsthetic experience, philosophical speculation, the discussion of moral and political problems, all of which spring from an academic background, are not unrelated to life; they are part of its very essence. We must proclaim that studies which contribute to the spiritual life of the individual man or woman not only have 'use,' but that a standard of values which allows anything to have a greater utility is false. There are no greater dangers to education than the sentimentalism and the materialism which regard the life of the factory or the office as in some way more 'real' than that of the classroom or the laboratory. The eternal problems with which men and women are faced are the same in all; and any study which can help us to come to terms with them can never be useless or remote. It is true enough that the content of our education must at every point be related to life, but the phrase has a far deeper significance than is guessed by many of those who use it, and in thinking of its social and economic meanings we must not overlook the life of the mind and the spirit.

We may, perhaps, see this important question more clearly if we refer to the curriculum which Plato laid down for the rulers in his Republic. There is no doubt that this is 'academic' enough. It led ultimately through the abstractions of higher mathematics to philosophy and dialectic, and it bore no obvious relation to the particular

tasks of public administration which the rulers were to undertake. It is the model on which we have based, half-unconsciously, the education of our own administrative Civil Service. The young assistant principal, fresh from his First in Greats or mathematics, is confronted with the problems of the Board of Agriculture and Fisheries or the Ministry of Fuel and Power, and he is thought to be able to deal with their general administrative solutions more expertly than the professional fish-canner or mining engineer. Here we are on hotly disputed ground, for with the growth of the managerial and administrative classes, which is inevitable under modern conditions, their training becomes a matter of the greatest importance. A striking justification of the academic approach is given by the quite extraordinary success in the practical matters of war and administration achieved on military staffs and in Ministries during the last war by those nourished on our modern equivalents of dialectic. Those who are accustomed to decry the effectiveness of the academic person in the 'real world' might well remember that our present ambassador in Washington was formerly a professor of philosophy, and that the head of intelligence work on the Eighth Army staff was a don. Actually such special instances, which any reference book could multiply indefinitely, are scarcely necessary when we regard the record of our small administrative Civil Service, who, in their conduct as well as in their education and their achievements, have surely approached more nearly to the ideal of philosopher-kings than any other similiar group in any society.

But there are still many who complain that such administrators are aloof from the real world; that their education has been unrelated to their tasks, and that the

man to control, say, the output of non-ferrous metals is not a classical archæologist as it might be to-day, but one who has made a fortune by selling zinc 'short' for forty years. There is genuine substance in these criticisms. No one can feel satisfied, for example, with a system of education that leaves potential administrators completely without grasp of the effect of scientific discovery upon their world. But that criticism is superficial in the sense, not that it is unimportant, but in that it can be met by a fairly simple modification of the school curriculum. The real point at issue is the much more important one: are the mainly academic studies by which we train administrators too remote from the actual tasks of the world in which they will be called upon to act? It may well be asked if there is not actually a contradiction in Plato's own thought on this point. For he, who perpetually denounces the amateur in horse-training, in cobbling, and in education, is apparently advocating the rule of the amateur in politics. Such an objection shows a complete misunderstanding of Plato's whole attitude. His guardians are in no sense amateurs because their studies have not included particular techniques or bodies of information: they are rather the supreme professionals, for their studies have led them to a knowledge of general principles so broad and so profound that they include all special subjects beneath the synoptic vision of a right judgment. In a word, the guardians are wise in all things, for they have attained a knowledge of the Good. Translating this into the language of our immediate discussion, the contribution which their education has made at the level of spiritual experience has been so great that it outweighs some deficiencies in specialized information or skill, which they

are, *ex hypothesi*, intelligent enough to remedy at any time and without difficulty.

There is thus a grave error in the thought of those who consider 'practical' and 'academic' studies as equally vocational, just as there is another error, no less serious, in the view which regards the merit or the evil of academic studies to lie in their uselessness. The fact seems rather to be that these subjects are both useful and vocational: but the use which they have is the very generalized one of leading the learner to the closest possible insight into the general principles of both individual and social life; the vocation for which they prepare him, however imperfectly, is not that of plumbing or teaching or administering, but the pursuit of truth and goodness themselves.

The present tendency to equalize all subjects in status and esteem can only rest ultimately upon a profoundly materialistic philosophy. A society which ranks plumbing as an equally valuable study with Greek, since they are both vocational studies for certain occupations (and which should, indeed, rank plumbing even more highly, as being more closely 'related to life') is necessarily one which regards material amenities as equally important with the quality of mental and moral experience which it enables its citizens to enjoy. It is incidentally true, of course, that a society which fails to value academic studies adequately will not be successful even in the material sense, since the most fertile discoveries and most revolutionary ideas spring from those with high academic intelligences working usually in the academic field, a fact that is forgotten when suggestions are made that some of our highest intelligences must be encouraged to go into purely technical fields. These considerations must be borne in mind when we

are faced with attacks upon what is described as 'merely verbal education,' compared unfavourably, if vaguely, with practical pursuits. Such a comparison seems to ignore altogether that the whole progress of thought, of social organization, certainly of education itself, rests upon concepts which are verbal in character, and which depend for their use and development upon highly trained verbal intelligence.

The contribution which a subject may make at what we have called the spiritual level raises the vexed and difficult problems of the education of the emotions. For many years it has been widely contended that English education has failed to give proper weight to music and the creative arts, so that its products are over-intellectual, and emotionally starved. In the more traditional schools the movement usually associated with the name of Thring of Uppingham has led to the wide provision of opportunities for æsthetic and practical activities, both in spare time and as part of the curriculum. Many critics of our secondary education would, it is probable, be surprised if they realized the amount of such work which already goes on. But the more radical reformers of the curriculum resent the position of the arts as subordinates to more academic studies. They see in them an essential way to mental health: what is argued to be their comparative neglect is held to be responsible for many of the moral and spiritual defects of our civilization. The authority of Plato is invoked for finding the closest relation between education in art and music and a 'harmony of the soul,' though it is sometimes forgotten how inclusive such terms were for Plato himself. This new regard for what are often called, in a somewhat question-begging way, the 'creative arts' is one

more factor contributing to the present reaction against high intellectual standards.

However sympathetic one may be towards the claims of these æsthetic studies, there are, nevertheless, certain dangerous confusions of thought concerning them that must be avoided. First, the emotional life of the individual is far wider and more complex than many of the protagonists of the education of the emotions seem to realize. The idea that education in art, for example, offers a royal road to the creation of a balanced personality, free of fears and aggressions, is surely a naïve one. It illustrates the danger, into which we often fall, of expecting more from the education given by our schools than it can provide. For, as regards the whole personality of an individual, the home background and the social environment, including the school as but one part, with its multiplicity of human relationships and moral experiences, are manifestly of supreme importance. That the school should provide every kind of spiritual stimulus within its power, including æsthetic experiences, I have already urged. But it is expecting too much to claim that one particular approach, through music or the visual arts, for example, is of supreme value in solving the general problems of emotional life.

Secondly, it must not be forgotten how great are the opportunities provided by the so-called academic subjects for emotional experience and creativeness. We are here faced again with the difficulty that haunts so much of our thought on education—that we so frequently teach to the wrong people things good in themselves. For many individuals, perhaps for the great majority, the need for personal creation is best satisfied at any age, and not only in childhood, by practising some craft, whether it be work-

ing in wood or clay, gardening, cooking, or dressmaking. But it is also true that there are individuals who obtain emotional satisfaction by working with ideas or words or in other ways provided by academic subjects. There is both a sense of creation and an intense æsthetic pleasure *for some individuals* in writing a good Latin prose, or in the skilful dissection of a dog-fish, or in reading a sonnet with intelligence and feeling. It is an error to claim a monopoly of virtue for any one approach. There are, moreover, great dangers implicit in an attitude that creates a sharp division between the training of the intellect and of the emotions. For such an attitude leads to a failure to see the spiritual possibilities of academic subjects. More dangerous still, if we separate the intellectual and emotional aspects of education we run the risk of encouraging those irrational attitudes that end in 'thinking with the blood.'

Finally, we return to the hard necessity that in the modern world certain basic skills are a prerequisite of effective citizenship. Any system of education that minimizes the importance of these in favour of 'creativity' or 'emotional awareness' or any similar ideal is increasing rather than diminishing the difficulties of the individual in pursuit of a satisfactory life. All this does not imply that the provision of greater opportunities for art, craft, and music is not one of the greatest needs in much of our education. But we are wrong if we put academic and emotional education in necessary opposition, and fail to realize the degree of fusion that is possible, and which with many individuals does occur.

These would appear, then, to be some of the general principles which we should bring to any reform of the

curriculum. It is not the purpose of this book to attempt to sketch desirable curricula for any kind of school, but rather to emphasize certain general ideas which such detailed curricula should embody. Above all, it seems necessary that we should consider these problems from a new standpoint, that of the kind of individual that we desire to produce. The primary question that must be asked is this: for an individual of a given age and intelligence, what is the equipment of knowledge and the attributes of mind and character that we believe should be possessed? Once an approximate answer is obtained to this question we can then have some hope of judging between the claims of rival subjects as contributing to that result. From a clear and steadfast vision of our final object, moreover, we shall find that we shall obtain enlightenment as to the best techniques to be used in order to attain it. But without a more resolute attempt to discover what we mean by the phrase 'the educated man' in terms of the needs of the contemporary world, and with due remembrance of the variations in individual capacities, we shall continue to teach the right things for bad reasons, or the wrong things for good ones, to maintain studies because of sheer inertia, or to initiate drastic changes on specious and superficial grounds.

### III

## THE UNIVERSITY CURRICULUM AND THE PROBLEM OF SPECIALIZATION

IN THE LIGHT of the foregoing discussion we can now consider in rather more detail some of the controversies that centre round the curriculum of higher education, particularly that of the universities. It is a commonplace that even in this country it is now possible to study subjects at the university level that a short time ago would have seemed quite unsuitable. The creation of chairs and lectureships in specialized and technical subjects has enormously increased the teaching and research staffs of the universities. This expansion has taken place partly in response to the growing technical needs of an industrial society.

Private endowment and the State have contributed to develop and maintain studies of obvious commercial or social importance. The movement has been stimulated also by a vague but widespread and influential belief that it was necessary to bring the universities more closely into touch with the modern world. It is likely, moreover, that the process will continue if the expansion of the universities is carried on in such a way as to introduce large numbers of students who are either unwilling, or not sufficiently intelligent, to follow the traditional courses. We must distinguish carefully, of course, between the creation of

posts which are to be mainly for research, and those which are to provide actual degree courses. It is mainly with the latter that we are concerned. For this expansion of university work raises in an acute form the questions, "Why are some subjects thought to be unsuitable for study at a university? Is there any explanation other than outraged conservatism why most academic people in this country regard with coldness, if not with aversion, a degree course in brewing?" To many this attitude arises merely from the pressure of the dead hand of Platonism, of which we have already spoken, attempting to maintain a privileged group of studies for a privileged class of people, pure, remote from the world, uncontaminated by the economic struggle which provides the prerequisites for any knowledge. It is, perhaps, difficult to regard those possessing academic knowledge as being any longer members of a privileged economic class, but the essence of the argument remains, and if we are to withstand the claims of the new 'practical' subjects we must be very sure that our resistance to them rests upon something more than prejudice.

Unless we are prepared to face an alteration in our whole idea of a university and to justify its transformation into something altogether different, we may say that it is concerned with education at the spiritual level, using the word 'spiritual,' let it be remembered, to include the very highest intellectual activities. The university is concerned with studies aimed less at the special skills of particular vocations than at the production of men and women possessing wisdom, possessing, that is to say, qualities such as judgment, the capacity and will to make new ventures in thought, and an interest in the perennial problems of

man and society. In the universities, if at all, is the search for the Good to be carried on.

It will be said at once that, though this may be an ideal picture of what a university *might* be, it bears no relationship at all to what universities are, or have been for many years. But the mere fact that we are so ready to criticize the products of our universities as narrow or uncultured shows that we have a vision that is not so far short of that ideal of what a university should provide. In any case, let us examine more carefully the objections to a perhaps too lofty idea of the nature of university education. The study of medicine, it may be said, is narrowly vocational. As for philosophical problems of any kind, what possible relevance for them has a university course in chemistry or engineering? In what ways are such courses more defensible than one in brewing? These questions are difficult to answer, and it is perhaps impossible to lay down some hard and fast line on one side of which are subjects suitable for university work, and on the other those that we must reject. But it is necessary, nevertheless, to explore some of the considerations that might weigh with one in making such a decision.

From a university subject, then, one is entitled to demand, first, that it should be readily related to the whole body of knowledge by the generality of its principles. Some intercommunication must be possible between those engaged in different branches of study if any coherence of culture is to be preserved, and if further progress of knowledge is to be possible. This is, of course, increasingly difficult as knowledge becomes more specialized. We are saved from being overwhelmed with vast accumulations of fact only by the emergence of new principles of

synthesis. And these can be forthcoming only when it is possible to find common methods of approach in quite different subjects. This, in turn, is possible only if these subjects are of a certain breadth, or, rather, if they have the potentiality for providing relationships with other fields. Even an apparently limited and specialized study such as classical archæology, though probably too narrow to form the exclusive interest of a student, can provide illustrations of scientific and historical method, and leads imperceptibly to social, economic, and æsthetic judgments.

We must also look for some element of a quality that we may call importance in the subject-matter of higher education. The notion of importance is a complex one in this context, and is perhaps not analysable. But it is real enough. The view that knowledge is of value in itself is absurd unless we recognize that kinds of knowledge are not equal in value. A research which determined the number of pebbles on a square foot of the path outside my window would undoubtedly be adding to the sum of knowledge. The low view which we should take of such a piece of research arises partly from the absence of this quality of importance. The idea derives mainly from a concern with fundamental questions. Thus the study of chemistry is more important than that of cosmetology, since it deals with the ultimate structure of matter, from an understanding of which a multiplicity of results follows, including the development of new cosmetics. The idea of permanence is also present when we say that a subject is important. An aspect of knowledge that may become rapidly and completely irrelevant to any of our needs because of some technological change cannot be held to be really serious unless it has other pressing claims. On these

grounds a subject like corrugated-iron engineering rests on too precarious a foundation for it to be a suitable university study.

We may also demand of a university subject that it shall extend fully the intellectual capacity of the most intelligent men and women. The phrase 'most intelligent' is, of course, an ambiguous one. If we decided to enlarge our university population to the level common in America we should find that the intellectual capacity of some of the students would no doubt be taxed by subjects that we should now regard as inadmissible. The point is, however, that if we fix the level of university intelligence in terms relative to accepted subjects, the claims of new subjects for admission must be judged by that standard. They must be capable of eliciting a full intellectual response from individuals who are of the calibre to study the more orthodox subjects.

Finally, we may ask that the universities shall be concerned with living and developing studies that will claim the attention of original minds in disinterested research. By using the word 'disinterested' I do not wish to go over again the argument concerning the 'purity of knowledge.' I wish rather to indicate that a subject should attract first-class minds to find out the truth about it, and not simply for financial profit or social prestige. It is this kind of consideration that links the highest intellectual effort with moral value, and which makes it clear that the criteria by which we seek to distinguish between university and non-university studies are related to spiritual worth of a particular kind, though spiritual value of other kinds is to be found, of course, associated with work at a much lower intellectual level.

No single one of the criteria we have mentioned is perhaps adequate to decide whether any particular subject is worth studying in higher education. But taken together they do provide some evidence on which decision can be taken. If these standards of judgment are sound, we are right to be disturbed, for example, by the introduction of degree courses in brewing or accountancy. For such studies satisfy none of the criteria. The principles of brewing involve generality only in so far as they are part of chemistry and physics; a knowledge of the techniques of brewing cannot be said to possess permanent value, for if all brewing stopped to-morrow it cannot be maintained that the life of man would be markedly poorer in quality. Nor can we seriously contend that the actual practice of brewing or of accountancy (we are not speaking of the administration of businesses concerned with these things) can really absorb the full attention of the finest minds; they are simply not broad enough or difficult enough. Finally, though brewing may claim to be a living subject in the sense that its methods are constantly changing, the really important changes are the result of researches by physicists or biochemists rather than by brewers.

If it is easy enough to justify the exclusion of some studies, it is superficially more difficult to defend the inclusion of others. Medicine is an example. Its obvious 'usefulness' and the narrowly vocational training that it apparently gives are often used as arguments to justify the inclusion of other purely vocational subjects in the university curriculum. Actually, however, when we consider the range of studies involved in a thorough and successful study of medicine—ranging as they do, or should, from psychology to biochemistry—when we

remember the adequacy of the challenge that medicine can present to the best brains, and the remarkably wide front on which research is possible, we need have no misgivings about the legitimacy of the instinct which has made medicine one of the university schools of longest standing. Engineering gives rise to more serious doubts, and even if we accept the complete field of study included in the word, it is difficult to believe that specialized branches of engineering are suitable as complete degree courses. It is probably true to say that the range of subjects studied in our universities is now as wide as it legitimately can be, at any rate for a considerable time. Indeed, it is fairly clear that some universities have already gone too far in the direction of enlarging their curricula, with inevitable damage to themselves and to the tradition of English culture.

Although, in my opinion, a number of the subjects usually called technical or vocational should be excluded from universities, this is not to deny their great importance. They will actually be better served by creating and encouraging new kinds of technical college to carry them on. The great expansion in higher technical education that the country undoubtedly needs must be accomplished, not by the dilution of existing universities with unsuitable studies or students, nor by the creation of many new ones, but rather in the development of institutions of a kind at present very rare in this country: technical colleges in which high standards are preserved by a loose affiliation with a university. There is a great difference between such an arrangement and the actual inclusion in the university curriculum of subjects which would be quite appropriate in such colleges. It avoids the lowering of standards that

must occur if an equality of prestige is conferred upon many subjects regardless of whether they are superficial or profound in their aims and methods. It actually encourages the growth of technical studies by freeing them from what are for them unsuitable academic accompaniments, and it leaves the universities free to experiment in fitting their own properly academic curriculum to the needs of the modern world, untroubled by fears that some valuable suggestions may founder simply by reason of the intellectual incapacity of many of their students.

Any consideration of the content of higher education must sooner or later face the questions included in the word 'over-specialization.' No criticism is more frequently heard of the universities, and still more of the senior forms of grammar schools, than that the education they give is over-specialized. It is a most important criticism, for it presupposes an ideal of balance or generality in the curriculum that it is most necessary to examine. A growing pressure upon university accommodation, the greater body of knowledge that now exists to be covered, particularly in scientific subjects, and the demand that arises on social and economic grounds for more 'experts,' once again particularly in science, are the chief causes of what is held to be an undue concentration from too early an age upon the specialist subjects. In opposition to such specialization the ideal is upheld of a 'sound general education' carried on for as long as possible, and, in support of the claim that over-specialization exists, we are repeatedly told how many undergraduates are completely 'uneducated.'

It will probably not be thought to be begging, too obviously, the question of what is meant by 'general education' if it is agreed that a person who has studied, for example,

no other subjects but physics and chemistry from the age of fifteen is omitting some essential elements. But such an admission does not mean that we must accept uncritically much of what is written concerning over-specialization, for it is a subject on which there is the greatest confusion of thought, and in which many of the remedies proposed are worse than the disease. The complaint that too many specialists are lacking in culture sometimes rests on too narrow a definition of culture. Too often insufficient allowance is made for a lack of social confidence that is almost inevitable in view of home circumstances. Again, it is significant that the complaint of over-specialization is most frequently made against scientists, and the scientist has some justice in his retort that the classic or the historian who knows nothing of science can no longer be called broadly educated. But the most important point that is too often overlooked is the educational value of a fairly deep study of a limited field, even in the upper forms of schools. There is no substitute for this in a patchwork of superficial studies without depth, and revealing no possibility for genuine standards of scholarship. The idea that in order to ensure the general education of, for example, the scientist, it is simply necessary to insist on a large proportion of the available time being spent on non-scientific subjects, almost without regard for what they are, is very commonly expressed. It rests upon insufficient thought and on a complete disregard of the psychological resistance that such schemes encounter. The cultural effects upon a science student of several periods a week of compulsory French are usually negligible. The language may be a valuable vocational tool, but it is a superstition, justified neither by practical experience nor by honest

analysis of the theoretical issues, to imagine that such hours are automatically cultural merely because they are not specialist. The arguments that justify such non-specialist work are based on the vague feeling that, since linguistic studies have often been associated with humanism, with wide interests and a concern for general problems of individual and social life, they have some intrinsic quality in them, almost apart from their content, that makes for 'culture.' In a similar way, mathematics or science for the classic or historian are often demanded without regard to the really important questions as to what *kind* of knowledge is meant. Nothing could be more childish than the belief that the ability to solve quadratic equations, or understand the Leclanché cell, has anything to do with breadth of culture at the sixth form level.

The question of specialization is confused because the whole idea of a general education is still very largely unexplored. We are actually justified in calling an education over-specialized for two distinct reasons. It may have omitted to give some of the information and skills that we regard as essential for the educated person of a given age and intelligence, or it may have failed to give scope for the enjoyment of some of the important spiritual experiences within the range of the individual. Until we are much more certain than we are at present what should constitute the intellectual equipment of the educated person our charges of over-specialization must necessarily be vague. Nor must we forget the qualification that we can provide experiences only within the intellectual and emotional capacities of the student. Too often critics seem to imply that a few modifications in the grammar-school curriculum will produce a generation of works-chemists

whose devotion to their specialist subjects will be combined with a wholehearted admiration of Mr T. S. Eliot or Mr Benjamin Britten. Would that it were so; but every experience suggests that much of the dissatisfaction with the Philistinism of specialists rests on an over-optimistic view of the capacity of the ordinary graduate.

The foregoing paragraphs must not be misconstrued as indicating a complacent attitude, or one that underestimates the great improvement that is necessary in the standard of the general education of our specialists. But there is a very real danger that an exaggerated fear of over-specialization, ignorant of what is being attempted and achieved in the schools, may lead us into experiments which may do genuine harm. On the basis of the Harvard Report on General Education, for example, some writers are now suggesting the virtual destruction of advanced work in grammar schools. They forget, or are ignorant of, the fact that much of what the Harvard Report recommends is already covered in the schools, a good deal of it by the School Certificate stage. The further advance that we must achieve will be obtained only by a careful assessment of what more we can properly and possibly demand, and by prolonged experiment in the methods of obtaining it.

In attempting that assessment we must accept in a more frank and less grudging spirit than we do now that a considerable degree of specialization must occur and need not be disastrous. The growth of knowledge forces us to recognize that the not very far distant time has passed when the educated man could take all learning for his province. Milton's conception of a curriculum expanding to cover every new department of knowledge grows ever

more fantastic. For the generality of those undertaking higher education, particularly as their number increases, we must reconcile ourselves to more partial interests and a more limited definition of general education. There are, as we have said, grave dangers in failing to make this adjustment—dangers of superficiality, of losing the value of high intellectual standards, and of frustration for individuals of very high ability by forcing them reluctantly to diffuse their energies over too wide a field. The more we prescribe compulsory elements in general education, too, the less time will be available for self-education. We have seen that the very narrow and specialized curriculum of the nineteenth-century public school had certain advantages for a minority of those who followed it, among them being the ample scope it gave for wide reading. Such opportunities will be sacrificed altogether if, in the name of general education, we insist upon an overfull formal programme.

Thus we must look elsewhere, for general principles of a more realistic and constructive kind than the mere multiplication of subjects, to avoid the dangers of overspecialization. First, it is necessary to make more certain than we do to-day that all the possible kinds of value are obtained from the specialist work itself. There is no doubt that, if it is followed in the right way, the study of science, for example, can be made to encourage that clarity of thought sometimes associated with languages, and to satisfy that sense of creation which is often assumed to be the monopoly of the arts. There is a tendency to associate certain values too exclusively with particular kinds of study, and to ignore the possibility of realizing them through others.

Secondly, we must attempt to define the bare minimum of knowledge that should be possessed by an educated citizen, whatever his particular study, and take direct measures to see that specialists acquire it. Thus if we decide, as we should, that a boy leaving school at eighteen should have a knowledge of the political constitution of his own country, then we must arrange for this to be included in some non-specialist course, whether we call it modern history, or social studies, or civics. Such an attempt at precision in defining some of our demands upon the general education of individuals of a certain level of intelligence would do much to prevent the present waste of effort in aiming at a too vague conception of culture.

We may hope, also, to make progress by attempting in all our teaching to relate specialist studies to other fields of knowledge. Such an end will be achieved, not only by deliberate teaching, but by the whole attitude of the teacher, a nebulous but very powerful factor in all education. A historian who shows that he has learned enough science to appreciate its influence on the life and thought of the last three centuries, or the scientist who knows enough of the historical background to see the same process from his own point of view, will have on some of his pupils a most stimulating effect that will, for example, lead to that further reading which, once it is established, means that the battle against over-specialization is more than half won. This demands much from the teacher, among other things an effort of continuous self-education, but this is true of any attempt to solve the problems of specialization. We must also explore the possibilities of subjects which in their very nature bridge the gap between

specialists. At the university level philosophy is, of course, the supreme example of such a subject, for it is concerned with knowledge itself, and its examples can be drawn from any particular field. At lower academic levels, the teaching of English, or of history, or of social studies, can be made to establish relationships between different kinds of knowledge.

Finally, we must take more active steps to make more generally accessible the results of specialist work. If we take classics as an example, we have said that classical literature can contribute uniquely to the education of clever people: that was the principal reason why the education of the nineteenth century often produced such admirable results, even though, by our standards, it was grossly over-specialized. But it is no less true that the majority of able men and women no longer study classics to the point at which such a contribution is made. It is no solution at all to insist that they shall all learn elementary Latin. That is simply mistaking the shadow for the substance. The rudiments of Latin must not be revered as a substitute for the culture to which they once provided the first step for all educated men. The remedy is to give to those who are not classical specialists some familiarity with the classics in translation. Admittedly, much is lost in this way. But that loss must be accepted, however reluctantly; there is no alternative. In the same way, the knowledge of science that is required by able individuals specializing in history or classics or modern languages is an acquaintance with its broad conclusions, its method, and its ideas rather than an inculcation of its simple grammar, except in so far as such elementary knowledge is indispensable for an appreciation of its general contri-

bution to thought and society. It is particularly important that all people should be introduced, in so far as they have the ability, to what may be called the perennial problems of man's life. If in our universities, and even in our sixth forms, students can be induced to ask themselves and each other such questions as "What do we mean by freedom of thought?" "Are standards of judgment absolute or relative?" then we need have few fears of the ill-effects of specialization. If it was the greatest strength of the classical education that much of its subject-matter was concerned with just these questions, it is probably through translations of the classics that we may still best introduce them. But, however it is done, there is no more important task for a general education. For an appreciation of the existence of such questions and a knowledge that throughout the centuries they have been the concern of the finest minds are not only essential in themselves; they provide the stimulus to a continuing effort of self-education. Thus ideally our attempts at the general education of specialists must aim at making two related contributions to the life of the individual: first the minimum equipment of attainment to provide a foundation for reading, thought, discussion, and experience, and secondly the stimulus which shall lead the individual to pursue those activities, and the idealism that shall make him resolute in seeking the good in personal and social life.

It may be profitable to consider in a little more detail the general education of one particular group of specialists. The case of the scientist is probably the most interesting. It is his general culture that is in greatest disrepute; his social responsibilities are obviously profound,

and it is therefore essential that his education should be broad enough to fit him to undertake them. By reason of their very numbers the science specialists offer a particular and increasing problem. Most of those with experience will agree that before the age of fifteen or sixteen, the age of the present school certificate, the education of scientists should not differ markedly from that of those who propose to specialize in other subjects. The prescription by the universities of a school certificate with a certain spread of subjects as a condition of university entrance expresses a widespread, and in my view perfectly justifiable, opinion that up to that age a certain core of knowledge should be acquired and a certain range of interests explored by everyone of the requisite intelligence. But while most people would agree that the study of a foreign language for four or five years is necessary, it is doubtful whether Oxford and Cambridge are right in insisting upon two such languages, of which one must be Latin. Something has been said previously on this question; it is enough here to reiterate that most of the arguments in favour of Latin as a compulsory element in general education are plainly fallacious or frivolous, while its retention, so far from strengthening the position of the classics, actually weakens it.<sup>1</sup>

But the main difficulties concerning the general education of the scientist occur at the sixth-form stage. Here, during the last two or three years at school, some specialism must take place. Even if the legitimate requirements of university faculties were drastically modified, there would

<sup>1</sup> The problem of devising reasonable university entrance-requirements has been completely changed, of course, by the imposition of an age-limit, below which the new General Certificate of Education cannot be taken.

still remain overwhelming arguments for some high degree of concentration on, say, chemistry, physics, and mathematics, arguments based on national economic necessity, on the wishes and interests of the individual child, and on the educational need to which reference has been made for depth and intensity in learning. But how far should this specialization go, and what studies should occupy the non-specialist time? Suggestions of a purely quantitative kind have been put forward from time to time, for example, that not more than two-thirds of the available time should be occupied in the specialist studies. In my opinion such limitations are almost valueless; it is *how* the time is spent that is important. I have already expressed my disagreement with the frequent claim that much of the non-specialist work should be in a foreign language. What are the justifications for such a claim? Not the vocational importance of French or German for a scientist, for though this exists, it has nothing to do with general education; such knowledge is simply important as a contribution to the more efficient study of the specialist subjects. Not that such a study contributes to the understanding of foreign culture, for a few periods a week spent in beginning German can scarcely be held to give an insight into the German mind or the national life comparable with that provided by reading and discussing the foreign page of *The Times*, or by reading *Faust* in translation.

Can it, then, be defended on the grounds of the verbal discipline it imposes? This is a very important point, for a mastery over words and a sensitivity to meaning are essential elements in the education of anyone capable of acquiring them. Undoubtedly, too, one of the most effective ways of acquiring such skills is by learning a foreign

language. But the scientist in the sixth form should have spent already four or five years on at least one such language. The purely practical, though immensely important, point must also be remembered that at this stage he will often be bored and irritated by work on a foreign language, and the objection that this should not be so if he is really well taught rests on the naïve assumption, too often made by those out of touch with the schools, that there is a limitless supply of quite extraordinarily gifted teachers. In fact the best way of continuing a linguistic discipline, and certainly the one most likely to secure the co-operation of the pupil, is through the study of his own language. Here there is much experiment to be done at every stage of education. We have to develop methods of teaching English that shall give not only some acquaintance with great literature but also the rigorous precision in the use of words, the critical approach to style and content, and the stimulus to perfectly clear thought that has been so often claimed for Latin. We are, in fact, in a transitional phase. Latin is losing its hold as a universal and compulsory element in academic studies, though not, we must hope, its proper and important place as one among several choices in a humane education. We have not, however, devised methods of teaching English in such a way as completely to take its place, though it is fair to say that much progress is being made.

But to return to our original problem, the education of the scientist: it seems that, if we rid our minds of preconceptions, we must come to the conclusion that a knowledge of a foreign language, except the bare ability to translate a simple passage as a vocational tool, is not a legitimate demand as part of his general education at the

sixth form level. It must be emphasized that this involves no criticism of foreign languages as an independent and specialist study. The verbally gifted and enthusiastic pupil can, of course, derive from them every kind of advantage, including that very important quality of insight into a foreign culture and an unfamiliar climate of thought. But I would maintain that this is too difficult and subtle an element to be regarded as anything but an exceptionally rare accompaniment of, say, 'non-specialist German' as usually taught.

The question "What must we demand of a scientist going to the university, in order that we may not be justified in calling him uneducated?" remains unanswered. My own solution would include a good knowledge of his own language, and of some of its literature; a knowledge of the basis of the Christian faith; and such an acquaintance with history and with current affairs as would enable him to cast his vote intelligently. A non-scientist, it is reasonable to assume, would be called upon to know sufficient of the history, methods, and discoveries of science as will enable him to appreciate some of its social and philosophical results. I would urge that the potential scientist should also follow such a course, for nothing would encourage him better to develop that sense of responsibility the absence of which is so widely and rightly deplored. It must be noticed that this demand for science as an essential part of the education of all is not met by elementary scientific teaching in the early years. What is needed is something with a much more direct bearing on social and intellectual problems, which can only come late in school life, when it can rest on some basis of intellectual maturity.

If we accept some such minimum objective of general education as that outlined above we may hope to approach the problems of its realization with some hope of success. Those problems are, however, still largely unexplored; our attitude to them must be experimental. It can be said, however, that the actual amount of time necessary for the kind of education we have outlined is not nearly as great as is sometimes supposed. Depth, rigorous standards of scholarship, the discipline of advanced work, will be found in the specialist studies. The function of the non-specialist subjects is primarily to arouse interest and to communicate the minimum requirement of factual knowledge on the basis of which that interest may develop. It is also fairly clear that such an education can only be adequately tested by a general paper, or several such papers, of the kind now set in university scholarships. This is obviously the rational way to test a general education, rather than to rely on the more detailed elementary knowledge of several limited subjects provided by papers at the school certificate level.

It has been said that the approach must be experimental. In the teaching of those studies usually called 'social' a wide variety of methods is particularly necessary. One teacher may approach it by the obvious road of modern history, but another may do so, and perhaps with no less chance of success, by reading Thucydides. One may believe in the direct approach by talks on current affairs, but it may also be found in another's experience, as I have found myself, that for intelligent boys nothing can equal the light thrown upon every kind of contemporary problem by reading in translation the simpler dialogues of Plato. The exact means must be left open; they will

depend upon the intelligence of the pupils, and still more upon the interests of the teacher. All that we can be definite upon is that every boy and girl of this level of intelligence shall have had the opportunity to think and read about certain subjects, whatever their special interest.

It is obvious that in all this work a particularly heavy responsibility rests upon the teacher. Further, it must be the task of the teacher to bring into our education that unity which has been so conspicuously lost. In Arnold's day it was possible for one man to teach practically the whole of what was taught. A hard-and-fast division between subjects could not exist when the same person was able to illuminate the Greek lesson with an illustration from the divinity period, or vice versa. To-day, of course, no such unity is possible. But we must lose no opportunity of establishing as close an integration as we can, even within the demands of the modern time-table. It is here that the use of the form-master is so important. If, for example, the same individual is responsible for all the non-specialist teaching of a group of the sixth-form scientists whom we are now discussing, much can be done to convey an idea of culture rather than a series of isolated snippets of knowledge. Ideally the teacher should himself be a scientist, so that relationships may also be established with the specialist work. But such an ideal solution is usually impracticable, and the most we can hope for is that the teacher responsible for the non-specialist work shall be sympathetic towards science, and not regard his function as that of applying a smattering of culture to a group of unwilling barbarians. The problem of unifying the curriculum is, in fact, primarily a psychological one: its solution depends on the presence of teachers who are

prepared to show their pupils by every means at their disposal that their own interests are wider than their subjects, and that they view their specialist studies against a broad background of developing knowledge. One can only deplore the fact that in secondary modern schools, where the much lower academic level makes specialist teaching far less necessary than in grammar schools, specialism is already becoming so firmly established.

It may be objected that this general education is purely intellectual: where is any spiritual or emotional value to be found? The answer is twofold. Every opportunity must be given to the pupil to follow any particular aptitude, in music or art, for example, outside the minimum requirements of a general education. But, more importantly, it must come through the work itself. Every subject, as we have said, can be made the means of the highest kind of experience for particular individuals. There is a dangerous tendency to disparage specialist subjects in this respect, and to regard a sense of value as something to be applied as it were from without on to a soulless structure of scientific knowledge. Nothing could be further from the truth. The enthusiasm of the scientist or the mathematician can lead to an apprehension of order, a love of discovery, and a regard for truth that is certainly not lacking in spiritual value.

For their full educational value to be realized, those specialist studies need an attitude that does not depreciate their spiritual elements but uses them, and through them establishes relationships with other subjects. It is a profound mistake to reiterate the dangers involved in the study of scientific subjects; their importance must be recognized, not regretfully, but as part of a rational and humane

general education, and the same is true, of course, of other specialist studies.

The breadth which a university education should have is a matter to which a good deal of thought and controversy is being directed. Hitherto, of course, the tendency has been to encourage a very considerable degree of specialization. But there is now a strong body of opinion that considers it wrong to spend the very important years from eighteen until twenty-two with no other formal education than a course in, say, chemistry or modern languages. In America this opinion is strong enough to have produced compulsory curricula of general education, and the emulation of American methods, which is one of the most lamentable elements in contemporary English educational thought, sees in this a model to be copied, forgetting that the ground in both specialist and general education covered in the graduating courses of most American universities is that common in the sixth forms of our grammar schools, our university courses corresponding more closely with American post-graduate studies. Without falling into this error we may, however, regard the specialization of some of our university courses with alarm. Superficially, they are little calculated to produce men and women with any very clear idea of the relevance of their subject for social needs, or aware of the very existence of philosophical and moral problems which should be at any rate on the mental horizon of people with their intelligence.

It must never be forgotten, however, how greatly the apparent narrowness of any university course is mitigated by the social and cultural life of a university community. In those universities where it is possible for attendance at

the lecture-room and laboratory to be the student's only contact with the university, then any course might well be too narrow. It is probably true to say that the provision of sufficient residential accommodation for every student at every university would do more to solve the problems of general education than any alteration of curriculum. There is a passage by William Temple that summarizes the matter with characteristic clarity:

One of the great advantages of the college system at the Universities is that it gathers together in very intimate social intercourse students of different subjects. It would be impossible for me, for example, to express what I owe to my intercourse with students of natural science during my time at Balliol in Oxford. My own study of natural science lasted for one term, during which I turned the age of thirteen . . . , but I venture to say that I have acquired sufficient knowledge of how scientists interpret the world to be of real service to me, and this I owe almost entirely to being a member of a college which contained people who studied natural science while I was studying classical languages, ancient history, and philosophy.

It is a platitude that cannot be overstressed that much of the education that goes on in universities is by means of informal talk with contemporaries or seniors, with all the stimulus to individual thought and wider reading that this entails. The seeds of general culture are far more likely to be planted in college rooms, on reading parties, or on walks, than in the lecture room, and even if we admit the necessity of the last, its lessons flourish much more readily in an atmosphere where prolonged and informal discussion is possible.

We can also be even more certain than in the case of the

schools that breadth is not automatically acquired by increasing the number of subjects. Paradoxically it may even be best secured by reducing the number of formal studies. I have no doubt that it is opposed to the interests of general education to insist, for example, that all science students should do more than one science. A good chemist who is forced to carry on with physics and mathematics at the university may well have to devote so much time and effort to them that he has none left for non-scientific subjects. It may be valuable for his chemistry that he should keep up his knowledge of physics and mathematics, though even from this point of view it is easy to over-emphasize altogether the importance of formal teaching. But it cannot be of help to his development outside science.

Against the arguments for broader university courses, particularly those which include several related subjects, it must also be urged that they prevent the attainment of genuine depth in one field. There is no more important function of a university than to provide, even for the mediocre student, a sense of knowledge as a living and growing entity. There are few, if any, experiences more truly educational than that obtained from the performance of a piece of research, and it is probably desirable, for the better students at any rate, that the degree course itself should include some small original investigation. The effect of this apparent narrowing of the field of vision often results in a remarkable growth in intellectual power and range. The worst kind of narrowness results from the belief that knowledge lies embalmed for ever in text-books or lecture-notes. Such an attitude is fatal to breadth of culture, however numerous and diverse the subjects that

are covered, and it may well happen that the greater the number the more likely this attitude is to develop.

Any broadening of university studies, then, must be undertaken in the light of the principles we have discussed in relation to the schools. The first task is to form as clear a picture as we can of the equipment of the educated man, and means must then be sought to develop it. With the very high level of intelligence that should be found in the university it seems an almost inescapable conclusion that the only studies that can truly be said to broaden the outlook of the specialist are philosophical. It is tempting to lay down that every honours student, whatever his subject, should have heard and discussed an exposition of the *Republic*. A very intense specialization in a chosen field, together with such an introduction to the perennial problems of thought and society, would probably be the most promising line of attack, were the teachers forthcoming to attempt it. It would provide the nearest general equivalent to that most successful of all educational instruments, 'Greats' at Oxford. But here, to an even greater extent than in sixth forms, the approach must be experimental. Probably there may be a greater initial opposition on the part of the students to be broken down, a still greater shortage of teachers who will be prepared to attack the problem, a longer series of unsatisfactory methods to be explored. But when we are faced with the task of dispelling the clouds of ignorance and indifference to social and æsthetic and moral questions that still lie too low on our universities, can it be doubted that our best hope lies in a successful continuation of the attempts that are now being made to raise philosophy to its proper stature in our education?

#### IV

### EQUALITY AND THE CONTENT OF EDUCATION

AMONG THE VARIOUS factors that affect the kind of education received by a particular child we may mention its sex, its social and economic class, the career it hopes to follow, the wishes of its parents, and its ability. In practice some or all of these considerations usually work simultaneously, and we have already mentioned some of their effects. The Act of 1944 envisages ability and aptitude as the only relevant criteria by which the kind of education to be received by a person shall be decided. We are committed to a policy of equality of opportunity for all children. But the idea of equality in its bearing upon the curriculum is too complex to be dismissed in a phrase, and further examination of the conception of equality of opportunity is necessary if we are to understand some of the controversies that surround the content of education.

It may help to clarify our ideas if we return once more to Plato. He envisaged, of course, a very sharp differentiation in his educational system to correspond with the intellectual and moral endowments of the individual members of his Republic. Dividing them at birth into three psychological types, he was concerned only that the content of their education should be fitted to their potentialities. The appetitive, the executive, and the philosophic soul all demand their different curricula. Two points at

once emerge when we examine this scheme. First, in spite of the effect that Plato is often supposed to have had on European education, this quite fundamental part of his educational plan has, of course, never been put into practice. His vision was that of an education that should depend upon no other consideration than the capacities of the individual; it was to be the same for boys and girls, and was to be unaffected by the social or economic status of the parent. We would do well to pay more attention to this aspect of Plato's thought and less to finding 'crypto-fascist' tendencies in his over-simple division of human beings into three types.

But we must also notice a second point. The method by which Plato envisaged selection for the various kinds of education is left vague. The very point on which so much modern controversy centres is glossed over, and there is no information as to what methods Plato would suggest for distinguishing a future philosopher-king from a tradesman, beyond the facts that the diagnosis is made at a very early age and that there should be an opportunity of transfer at a later stage from one kind of education to another. Nevertheless, the vision remains, striking in the originality of the assertion that what really matters is quality of endowment, uncompromising in its belief in such differences of educability, to which the content of education must be adapted.

The Middle Ages, in spite of the rigid hierarchy of social classes which they embodied, had something of Plato's spirit in the readiness with which the Church gave the education of the clerk to the poor boy of outstanding ability. As we have seen, this idea of academic education which to some extent was capable of cutting across social

barriers ran parallel to a vocational education for the profession of knight or gentleman, independent of ability and determined only by social class. The changes that followed the Reformation produced by the end of the nineteenth century a content of education affected more by social and economic class than by any other circumstances. The Victorian public school and grammar school based their education on the academic curriculum necessary for the gentleman, almost without regard for the intelligence of its pupils. At the other end of the social scale the elementary school instilled the rudiments of literacy into groups of children chosen only by economic background, and the problem of the wide variation of intelligence among these children was approached with the idea of keeping all at the same level of attainment, rather than with any notion of the appropriate treatment of differences. We can all see to-day what a profound injustice and what a profligate waste of talent is implied by a curriculum adapted to social class rather than to individual ability. The current of our time is equalitarian, and where the pioneers of the last century were content simply to demand an education of some kind for all boys and girls, it is easy for us to be more radical in the changes that we can propose. Actually ours is a transitional period, when various forms of education co-exist; that based on a social hierarchy survives; a new form adapted to a more democratic and equalitarian society (the two are not, of course, synonymous, as many writers on education seem to think) is still not fully realized. If education is not to become a victim in a struggle between opposing theories of social organization, it is essential for us to understand what the educational results of equalitarianism can be.

It is, unfortunately, extremely ambiguous to say that one believes in equality. In one sense Plato and Morant were equalitarian, for they emphasized the need for recruiting the intellectual leaders of society from any class in which they could be found. The 1902 Act was a step towards this idea of equality of opportunity in the prospect which it revealed of an efficient higher education open to the able minority of every class. It was a Platonic conception, a movement towards the view that the kind of education a person receives should depend only on his talents.

But a belief in equality can lead us to minimize the differences between individuals, and to treat different people in the same way; it is this attitude that is most commonly meant when we speak of equalitarianism. Such a view is now becoming increasingly influential in educational affairs, though it is not always explicitly stated by those who hold it, particularly as they usually apply to it the word 'democratic.' Its effects on the content of education may soon become profound.

The most obvious result of such a belief is an attempt to force all children through a common curriculum. It will be clear from what has gone before that I believe wholeheartedly in a curriculum that shall be in part obligatory for all individuals, provided that they are of approximately the same capacity. The equalitarian omits this qualification, since he is reluctant to admit the existence of very great variations. Hence he will favour an organization of education in which a common kind of study is retained as long as possible, until, that is to say, the evidence that some children can learn two or three languages with ease while others cannot learn one becomes so apparent that even the most doctrinaire cannot ignore

it. It must be admitted that a similar reluctance to admit the fact of human inequality is characteristic of many who would disclaim any belief in equality. It is still true that the male children of wealthy parents normally attempt to learn Latin from the age of eight, whether they have the high intelligence required or not, since it is still the appropriate education for the gentleman. Here we have equalitarianism within an economic group. Harmful though it may be, it is perhaps less so than other forms of educational levelling, since it does not penalize the very intelligent, and is merely a waste of effort for the average or stupid child. At the same time it does very clearly exemplify the futility of determining the curriculum of a child in the light of his father's income, a consideration which is surely irrelevant unless we are prepared to make both the doubtful assertions that capacity to make money is a good test of high verbal intelligence, and that this kind of intelligence is always inherited. But a far more harmful result of a belief in a common curriculum is the proposal of at least one local education authority to keep all children following such a curriculum until the age of thirteen instead of transferring at the age of eleven to schools where greater differentiation is possible. The probable effects of such a course upon either the intelligent or the very dull are obvious enough.

Equalitarianism may have still more unfortunate effects upon the content of education, however. The objection that all children cannot hope to follow a certain curriculum may be met by the reply "Then alter the curriculum." The fact that very few children can profit by learning Latin, Greek, and French at the age of thirteen may lead to the assertion, supported by spurious psychological

arguments, that no one shall, and the right of minorities will be sacrificed. An alteration will follow in the regard in which certain subjects are held, not on educational but on social grounds. I have said something about the contemporary disapproval of academic subjects. It arises, to a great extent, from the growth of equalitarian sentiment. Studies which have hitherto been followed only by a minority acquire all the odium attaching to privilege of any kind. An equalitarian society will not look with favour on abilities possessed only by a few or tolerate opportunities enjoyed by a minority, even if they are freely open to all men with the right kind of ability. There is a danger that we shall be forced to equalize the esteem which we give to different subjects. Since nearly all men can do fretwork and very few higher mathematics, the spiritual value of fretwork must be magnified at least to an equality with that of the calculus. This attitude towards the subjects of the curriculum has already developed in America. In our righteous anger that they have hitherto been largely the preserve of a social class, we are in danger of forgetting the supreme value that particular studies may have.

We may see these dangers of equalitarianism in more concrete form if we consider the proposals put forward by a number of local education authorities for the establishment of 'common' or 'multilateral' schools. Instead of the academically most gifted children being sent to grammar schools and children with different abilities being likewise allocated to other special kinds of school at the earliest stage at which their particular abilities can be diagnosed, it is proposed that all children, whatever their intelligence, should go to a common school. Whether there should then be developed grammar, technical, and

modern streams within this school is a matter for debate among the adherents of the scheme. Whatever the precise form of such schools, however, it is possible to forecast with some accuracy their effects upon the content of education. The most important will be the complete disappearance of certain subjects from the curriculum. A very small proportion of the total population has both the desire to learn Greek and the high intelligence to make such a study possible. Only in a large and selective grammar school is it possible to maintain Greek studies, since only in such a school can a sufficient number of that minority be assembled together. Even in a very large common school it is arithmetically impossible that a sufficient number of pupils will wish to learn the language to make it at all feasible to supply it. It would not be economically possible to maintain Greek for two or three children a year over a five-year course, yet this is what would be required in a common school of 1500 pupils. This subject, about the value of which something has already been said, will therefore disappear from our schools, maintaining a precarious foothold in those independent schools whose very high fees enable them to provide a very favourable staffing ratio. We are thus faced, not only with a plain denial of equality of opportunity, but with a narrowing and impoverishment of the whole content of education.

The same narrowing will occur in the variety of courses at the sixth form level. Once again we must compare a common school with a large selective grammar school. In the latter it is possible to provide four, five, or even more alternative curricula to suit the capacities and needs of the individual. The content of education is adapted

to the child. In a multilateral school of 1500 pupils the grammar school element cannot exceed 250 or 300; the school becomes a very small grammar school, with the disadvantage that at the most two sixth-form courses can be offered. A contraction of the possible alternatives of study occurs. A spurious appearance of wide choice may be given, as in many American schools, by splitting subjects into small sections and permitting the building up of curricula from unrelated fragments. But a genuine choice between really unified courses, any one of which is an education, has disappeared.

We have chosen two special examples of a general process that will occur throughout the school. The fact is that those who in an ordinary selective grammar school would be spread out over three or more parallel classes, according to their intelligence and aptitudes, are in the common school congregated into one, unless the school is of a size, say 5000 pupils, which on other grounds would be unacceptable to English opinion. The grading of the content, its adaptation to individual needs, becomes scarcely possible. In the changes that would follow the widespread introduction of the common school it would be the more academic subjects that would be squeezed out; the retention of subjects only suitable for a minority becomes impossible on simple grounds of arithmetic. But the loss to the community, in economic, social, and spiritual wellbeing, the deep injustice involved towards the ablest members of society, are out of all proportion to the numbers involved. Such losses are not capable of arithmetical computation. Nor does it need long-term experiments to be sure that such results would follow. The virtue of experiment is one of the most well-worn justi-

fications for such schemes. The data from which it is certain that the content of education would be culturally impoverished by the creation of common schools already exists, much of it in the multiplication table. It does not require that the future of hundreds of children should be jeopardized to draw the obvious conclusion, even if one ignores the all too obvious effects of this kind of education in America. Actually there is no reason why we should ignore completely the effects of the comprehensive school in America. Though the need to create a sense of national unity in a very heterogeneous population has made the creation of such schools much more justifiable in that country than in England, it is nevertheless very necessary to take account of the movement away from them that is now shown by the most responsible educational opinion in America, of which Professor Kandel may be taken as representative.

It may be objected that I have stressed exclusively the effect on the education of the most intelligent children. I have done this for three reasons. The first is that, because of their greater ability, more possible courses of study are open to them. It is the highly intelligent who suffer when opportunity is restricted, for Nature herself has limited the intellectual opportunities of the majority. Secondly, since the numbers of those with an intelligence near the average are so great, it is possible in a common school of any given size to create groups of near-average children much more homogeneous in aptitude and interests than those including the extremes of the intelligence range. And, finally, many of the staunchest defenders of the common school are among the most anxious to provide special segregated schools for the dull and backward.

No one who has seen the remarkable work done in such schools with a content and a technique adapted to the children can doubt that they are right. But it is a curious inconsistency that removes from the uniformity of the common school those at one end of the intelligence range and not those at the other. The common school has its dangers for the average or near-average child, but they are dangers that arise from a sense of perpetual failure, of frustration in the face of the triumphs of abler children, rather than from a narrowing of the content of their education.

It may be felt that, in relation to the common school, the content of education has been considered as too exclusively intellectual, and as too preoccupied with subjects, and advanced subjects at that. Is it not possible, it may be asked, for children of almost every intelligence to share not only in a common core of learning but also in the activities outside the classroom that contribute so much to education? In my opinion the answer must be, no. It is true that nearly all children require a knowledge of certain common subjects, as indeed we have emphasized. But the resemblance between a given subject as learned by a very intelligent child and a dull child is purely nominal. Beyond the most elementary stages that are certainly passed by the age of ten, mathematics means, or should mean, something totally different in content to individuals of different intelligence, and we are doing both the clever and the stupid a grave injury if we minimize the divergence. Nor does the argument that the academically dull child will shine at some activities which baffle the intelligent bear examination. The little truth that it contains leads merely to that dangerous tendency to give

equality of value to widely differing activities that we have already discussed.

We are, then, surely driven to the conclusion that the common school symbolizes the conflict between equalitarianism and the idea of equality of opportunity. In education the two are incompatible. The former seeks to minimize differences between individuals, and as far as possible to treat them similarly so that they may be as little conscious as possible that they do differ. It minimizes also the higher value that must be placed on some pursuits rather than others. Opposed to this is the view, in my opinion the right one, that among the foundations of good education is a frank acceptance of human divergences, and a determination to devise an education that can be adjusted to these great differences in quality and degree of human endowment. It is this attitude that we crystallize in the phrase 'equality of opportunity.' But when we use that phrase we too often think of opportunities to enjoy amenities and buildings. It would be idle and disingenuous to say that these are not important. But the most difficult and the most important equality of opportunity to provide is that of access to an education with an appropriate content.

If we accept these arguments and reject the idea of a common school on the grounds of its harmful effects on the content of education, and hence on the quality of our culture, there are, of course, great problems still unsolved. A crucial difficulty remains: what techniques of selection can we use to distinguish levels of intelligence at an early age? This is not the place to discuss so technical and difficult a question. But it can be said, in spite of the *volte-face* of some psychologists, that the

immense volume of work that has been directed towards it has borne fruit. As regards intelligence, if not aptitude, it can fairly be claimed that we can make at ten and eleven an assessment that is reasonably accurate, and on which the broad alternatives of possible curricula can be decided. If, further, we make arrangements—as we are now doing, and as Plato insisted that we must—for the transfer of those in whose cases mistakes are made, it can reasonably be argued that justice is being done. Certainly there is no injustice comparable with that which must occur when children are denied the right to follow at their own speed the curriculum most suited to their gifts.

The demand for a comprehensive school springs from a genuine desire for social justice; it hopes to remove the evils of social and economic class division by the union of all children in one school. It is wrong because it fails to recognize the greater injustice that this creates, and because it ignores the fact that if we choose the children in selective schools from every class then we are actually moving by more rational means towards a homogeneous society. Indeed, the mixture of social classes in comprehensive schools will often be smaller than in other kinds of school because of their very local character. One is astonished to find one of the ablest defenders of the comprehensive school (Lady Simon of Wythenshawe in *Three Schools or One*) actually advocating that these schools should be set up in areas, such as new housing estates, where they may be to a great extent socially homogeneous. Instead, therefore, of selective schools embracing fairly similar intelligences but widely different social classes, we should have schools containing all

levels of intelligence but much more homogeneous socially. Why a system of education so manifestly based on the parents' social position should be thought to be more 'democratic' or 'classless' than one which takes into account the individual's intelligence it is difficult to see. It is at any rate clear that such ambiguous social advantages can scarcely be taken seriously in the light of the overwhelming educational disadvantages to which reference has been made.

But it must be granted that the ideal of equality of opportunity will escape us unless we visualize education as but part of a programme of social advance. The real obstacles to its realization lie not in segregated schools but in overcrowded homes, in dark and miserable streets, in poverty and in ignorance. It will be achieved only when these disappear, and the battle against them is slow. It cannot hope to succeed if we fail to grasp the nature of our real objective. An apparent short cut to social justice through an equalitarian and uniform education will merely destroy the value of what it seeks to spread more abundantly.

The controversy concerning the organization of our education that has been briefly discussed here from the particular standpoint of the content of our teaching is much more than a parochial squabble between educationists. It arises from the deepest stresses in our society. The problem with which we are faced is to diffuse the culture that has hitherto been the privilege of a minority without debasing it. Some historians, Rostovtzeff and Toynbee for example, warn us that the task is perhaps impossible. It may be so. But we can at any rate be certain that the best hope of success lies not in such an impoverishment

of culture that it shall simply embody the tastes and standards of the majority of men, but in the steady recruitment from every class of those who may hope to share in it, to enrich it, and to interpret it as widely as they may.

## LIBERTY AND THE CONTENT OF EDUCATION

THE IDEA of liberty is even more important than that of equality in contemporary education. 'Freedom' and 'liberty' are, of course, very complex terms, not least in educational contexts. For they concern the proper adjustment of relationships, and in education a number of different kinds of relationship arise. There are, for example, those between child and school, between parent and school, and between the school and various outside bodies, the most important of which is the State. The common use of phrases such as 'the legitimate freedom of the schools,' 'the freedom of universities from outside interference,' or 'the necessary freedom of the child,' indicates the importance that the idea of liberty has assumed in educational thought. It is inevitable, therefore, that any consideration of the content of education should deal with the effect which the idea of freedom has upon it. Such obvious questions as, "Should a child be able to learn what he likes; if not, who is to tell him what he must study?" show that if we are to understand the nature of the curriculum, and particularly if we are to change it, we must find out on what authority it rests, and what are the sanctions of that authority.

Perhaps the simplest way to approach what is actually a very difficult subject is to ask this question: "Suppose

the headmaster of a grammar school, having thought carefully about the curriculum of his school, wishes to change it in some radical way, say by abolishing mathematics. What would there be to stop him? ” The answer shows the number of influences that are at work on the content of education. For to bring about a major and controversial change of this kind he would have to secure the consent of his governors or of the local education authority; it is certain, too, that the Ministry of Education, through one of His Majesty’s Inspectors, would oppose the change. The universities also would stand in the way, not by direct intervention, but by the simple existence of requirements which would prevent the boys from his school from gaining university entrance, and the same pressure would be exerted by certain professions. The unconventional headmaster would have to meet, in addition, the criticisms of his pupils and their parents, many of whom would undoubtedly be opposed to the change, partly for vocational reasons, partly from a conviction that a general education must include mathematics, and also conceivably because some of the children simply liked learning mathematics. The parental pressure would doubtless be exerted also on the local education authority. Finally, he would have to withstand the opposition of his staff (and the opposition would not be confined to mathematicians) and of his professional colleagues generally.

It is out of this complex interaction of influences that the curriculum grows. There is nothing new, of course, in the fact that the schools are not entirely free to choose their own curriculum. At one time, not only was the syllabus of Latin studies laid down by the State, but the

very Latin grammar to be used was prescribed. The foundation statutes of many grammar schools fixed their education immutably for centuries. But the present situation is different in that the libertarian sentiment of the time resents controls on the freedom of the individual or the school, as witness the repeated references to the shackles which the universities are alleged to impose upon the schools, while, on the other hand, it appears that the State in particular is increasing its general power over education as over much else. It is necessary, therefore, for us not only to discuss the limits which may properly be put upon individual pupils in choosing a course of study and of educators in prescribing one, but also to decide what is the proper body to exercise this authority.

In the first place it will probably be generally agreed that the choice of the curriculum cannot be left entirely to the unaided judgment of headmasters and headmistresses. In a majority of cases, of course, no harm would be done, and, in fact, any kind of coercion is scarcely ever found necessary. But if every sanction and every examination requirement were removed, the children would in some cases be left to the individual prejudice and incompetence of particular schools, and occasionally the results would be disastrous, for example in the direction of over-specialization. Some safeguard is therefore necessary.

Of the controlling forces we have mentioned, the first to consider is the local education authority. There can be little doubt that the influence of local authorities is inevitably increasing. It is their control that is in the minds of many teachers when they speak of 'loss of freedom.' At first sight any fear of control by local authorities implies a distrust of the whole idea of democracy. Surely,

it may be argued, the control of such a fundamental element in our society must be in the hands of elected representatives. Yet, when we consider the range of ideas included in the word 'education,' we are justified in becoming doubtful. It is not only matters of administration and finance that are in question; it is ultimately the whole idealism and culture of our society. The scope of an omniscient education authority embraces in one vision the problems of plumbing and those of belief. It was for this reason that the highest duty of Plato's philosopher-kings was to be the supervision of education. In much that is included in the term 'education' the elected body is perfectly fitted to be the final authority. Society has a responsibility for certain minimum standards in the schools, of health, of attendance, of buildings, and so on, and that responsibility is probably best discharged in the first place through local government. But over other educational questions this is not necessarily the case. There are few who seriously maintain, for example, that local education authorities are competent to administer universities. Yet the intellectual and spiritual problems in the highest forms of some schools are not vastly different from those of the university. The competence of an education committee usually is, and always should be, increased by the presence of co-opted members. But some element of limitation remains. It is a sometimes vague and inarticulate feeling that there are some aspects of education beyond the legitimate scope of the local authority that leads to the often misdirected and doctrinaire rejection of its authority altogether. When we analyse such distrust we find that it is control over the content of education that gives rise to it. Though the individual

school should be prepared to accept the direction of local government in a number of matters affecting its work, and though it must listen with respect to its advice on the content and direction of education, there must be misgivings when it is suggested that its direction in such matters should be absolute. In concrete terms, we can readily welcome an 'organizer of school meals,' but must regard an 'organizer of curriculum' with great suspicion.

It will, of course, be objected that local education authorities have experts at their service, the directors or chief education officers and their staffs. But the assumption of control over the actual content of education by such experts involves very real dangers. First, ability tends to follow power. If control over the whole character of education is to be vested increasingly in administrative staffs, then our schools will be deprived of many of their ablest teachers, and this process is already taking place. We may end with a highly competent administrative staff supervising the work of a number of second-rate teachers. One cannot believe that this would be anything but a disaster. If it is more than lip-service that we pay to the idea that education rests ultimately on a personal relationship between teacher and taught, then we must deplore a tendency to diminish the number of first-rate personalities actually engaged in teaching; they are inevitably few at any time.

Secondly, it cannot be healthy for the power that is implied by complete control over education to rest with a very few people. In practice, of course, it is quite true that most education authorities and their directors wish for no such power; in practice the consultations that many of them have with their teachers are as frequent and wide-

ranging as could be wished. But the possibility of abuse remains, and can become a reality, for example, when a strong director with a weak or primarily 'political' committee converts the schools of the area into multilateral schools, a change which is superficially simply one of organization but which has, as we have seen, quite definite and deplorable results on the curriculum.

Further, the knowledge that authority over the very content of education lies outside their influence must have a disheartening and frustrating effect upon the teachers. And, finally, one must ask whether the administrator, removed from the actual business of teaching for a more or less considerable time, and concerned inevitably with a variety of problems far removed from the curriculum, is really competent *qua* administrator to speak with authority on the content of the education that he helps to provide. But one of the most alarming features in contemporary English education is the fear of freedom and of responsibility on the part of many teachers. Instead of struggling to take over new responsibilities which are properly theirs and which are still enjoyed by many schools fortunately placed under good local authorities, or safeguarded by good governors, we can see every evidence of teachers actually asking that administrators should remove from them the privilege and the temptations of decision. It is lamentable to find an organized body of teachers asking the State to make it illegal for a child to transfer from primary to secondary education before a certain age, instead of demanding the right to decide in the light of their personal and expert knowledge of the individual case. It is no less deplorable that any association of teachers should applaud an administrative decision that no child shall take

an external examination before a certain age. It should be for the schools themselves to decide at what age a given child is fit for a certain step, and if it is fitted to take such an examination at all. A profession that in this way forges shackles for itself can complain neither at the growth of administrative control, nor if it fails to attract the best individuals to its service.

If we reject the idea that the local authority and its experts are competent to decide questions of the content of education we must also use similar arguments with regard to the power of the central Government. In actual fact the Ministry is most diffident in its control of the curriculum. When attempts are made by individual members of Parliament, as they sometimes are, to suggest lines on which the curricula of schools should be dictated, the Ministry always disclaims any desire to exercise detailed direction. The principle is accepted that 'politics should be kept out of education.' This demand is strictly impossible to fulfil, as Plato showed conclusively. But the phrase does crystallize the desire that so fundamental an element in our national life should be kept as far as possible free from the changes and chances of the political scene. Nevertheless, the power to modify the content of education is implicit in the democratic system. The permanent officials of the Ministry, with whom we can include the Inspectorate, form a most important safeguard of the liberty of the schools. Though the curricula of schools have to be submitted to them, their attitude is symbolized by the fact that, as regards curriculum, it is 'suggestions' for teachers that proceed from the Ministry. Changes in the content of education, when they are initiated by the Ministry (for example, the possibility of

introducing Russian), are never commanded; it is merely requested that certain possibilities should be borne in mind, and there can be few teachers who regard the influence of the Ministry as in any degree restrictive of their liberty as regards the content of the education they give. But under certain circumstances this might change, and theoretically the control of the curriculum by the central Government is open to the same justifications and the same objections as that by local authorities. On the one side we have the view that in a democracy it is the elected representatives and their chosen experts who alone have the right and the duty to control every detail of a service as vital as education: on the other, one which emphasizes the enervating effect of such control upon the schools, and the dangers of its concentration in comparatively few hands, that by reason of their other pre-occupations cannot be supposed to be fully competent to decide on such questions. We are faced with a problem here that is much more than a matter of educational administration. It is essentially one of attempting to create and maintain free minds within a planned society. Since education is perhaps the most powerful means of moulding opinion, and for implanting a whole scale of values in the people of a nation, it becomes of the greatest and most practical importance for a democracy to decide whether complete control of such a force in all its manifestations can safely be placed in the hands of a simple majority. For such a course may open the way to that tyranny of opinion which led even so radical a thinker as J. S. Mill to deprecate State education altogether. "A general State education," he said, "is a mere contrivance for moulding people to be exactly like one another; . . . in

proportion as it is efficient and successful, it establishes a despotism over the mind, leading by natural tendency to one over the body." It is for those of us who believe that Mill was wrong in his distrust of State education to show that a democracy can maintain a system of education that avoids the dangers of which he warned us.

From the sphere of government, national or local, we pass to the individual parent and child. What weight should we give to the wishes of the parent in maintaining or altering the curriculum? The question is a fairly simple one. For any argument against the competence of elected bodies weighs *a fortiori* against the judgment of the individual. When a parent expresses a preference for one or other alternative among accepted courses, that preference will carry considerable weight, and if pressed will probably be decisive, even against the wishes of the child and the judgment of the teacher. But no parent can or should secure a radical departure from what other authorities agree to be the basis for any acceptable curriculum. No parent, for example, could prevent his child learning some mathematics during the early years of a secondary school course, for against him all the other authorities that we are now discussing would unite.

As regards the wishes of the child, the position is more complicated. In no aspect has education changed more completely in the last century, and particularly in the last twenty-five years, than in the degree of freedom allowed to the child. The romanticism of Rousseau and Wordsworth, the humanitarianism of the last century, the growth of individualism have all contributed to a far greater liberty. Two hundred and fifty years ago even as superficially advanced a writer as Locke put absolute

obedience high among juvenile virtues; Wesley's celebrated advice, "Break their wills betimes: begin this work before they can run alone, before they can speak plain, perhaps before they can speak at all. Whatever pains it costs, break the will if you would not damn the child" obviously leaves little freedom of choice to the pupil in any sphere at all. The difference between this authoritarianism and ordinary modern practice is striking enough; the contrast with much contemporary doctrine is that of two religious systems. The Augustinian theology of Wesley led him to the view that, since the inclinations of the child are naturally wicked, liberty has too many dangers for him. The school of completely free expression rests on a no less dogmatic, if less explicit, belief in natural wisdom. There is a certain inconsistency in their position. Mr A. S. Neill, for example, one of the best-known of the libertarians, admits that in questions of cleanliness, rules of behaviour must be imposed to preserve health. The weakness of the admission is obvious. If the health of the body necessitates limitations on the child's freedom, how much more the health of the soul, replies the Platonist or the Christian. To defend himself from this attack, the libertarian must retire into an agnosticism concerning any except the most material aspects of education so profound as, in the opinion of many, to disqualify him from assuming the title of teacher, and certainly sufficient to prevent him from proclaiming with any conviction that freedom is good.

To the moral implications of this controversy we shall return. But such a far-reaching belief in the child's liberty obviously has very marked effects on our attitude to the curriculum. In this country we have hitherto

believed in a considerable degree of dictation, both at the primary stage and in secondary grammar schools, where groups of compulsory studies have been laid down. Yet there are influences which are opposed to these obligatory elements. In the Report of the Secondary Schools Examinations Council the phrase "All subjects at each stage shall be purely optional, the pupil taking the subjects of his choice at the levels of his choice" sounds a new note of libertarianism. It is interesting to see that in America, where a freedom has hitherto flourished which could regard unrelated courses in agricultural chemistry, English grammar, physical education, and world history as an adequate basis for university work, the idea of a compulsory basic education is now gaining ground, whether in the form of the hundred necessary books at Chicago, or in the recent reports of Harvard and Columbia.

It is, I believe, clear that the individual's freedom of choice in the content of his education must be most definitely limited. Freedom there must be, but it should be the freedom to choose within a framework laid down by higher authority. For not only is it clear that certain subjects are more necessary than others, but to place the responsibility for making choices such as "Shall I learn mathematics or not?" or "I am a scientist: shall I go on with English?" upon the child is laying too heavy a burden upon him. Such choices are for us to make, and we are evading our obligations if we do not provide what we believe to be a right solution to them.

We turn now to the authority which the universities exercise directly and indirectly upon the content of education. No authority has been more criticized. The cramping effect upon the schools of university-controlled

examinations has been the constant theme of libertarians. Yet it must be stated at once that it is here that I believe the most competent authority to decide on questions of curriculum is to be found. The actual word 'universities' perhaps conveys too narrow a meaning. I am thinking rather of something which they should embody more completely than any other institutions: we may call it the consensus of academic opinion, the mind of the clerisy, or the convictions of an academic *élite*. In practice this is to a great degree the authority that at present exercises the greatest control. Not only directly through examining bodies but in many other ways the academic tradition makes its influence felt. The co-opted members of education committees and governing bodies, the administrative staffs of local authorities and the Ministry, above all the inspectorate and the teachers, are all representatives of that tradition. The fact that the democratic control of education works so well, the remarkable coherence that our intellectual life still preserves, is due to the influence of those who have a broadly common attitude to the aims of education, an attitude that has been formed by the universities.

At the present time, however, it is true to say that the guardians of the academic tradition are not sufficiently conscious of their responsibilities. That is the most significant and the most alarming fact concerning the content of our education. They are not fully awake to the tendencies, inevitable in a revolutionary stage of social development, which may either replace their influence by a disintegrating libertarianism, or hand it over to bodies incompetent to discharge it. It cannot, indeed, be maintained that the academic class does feel any real responsibility for the character of education as a whole.

Its interest is lukewarm and inexpert when it is not purely sectional. Nor is this surprising when we consider what has happened to this class through social and economic change. It has expanded enormously, and it has lost cohesion. Included as partners in the work of education we find both the professor of metaphysics and the teacher of metal-work, and if we ascribe to both an equal authority in educational policy—the teachers of metal-work enormously outnumber the metaphysicians.

If we consider only the universities, which should be the very strongholds of academic influence and the springs of educational leadership, we find a specialization of function already too far developed. It is, indeed, difficult to speak of 'the universities' with any certainty that we are speaking of any effective unity. The danger is apparent when we consider the abrogation of responsibility which is implied by the creation of professorships of education. We have made 'education' a special subject, like Greek or petroleum engineering. It is true, of course, that we may have experts in the history of education, in the techniques of testing intelligence, in child psychology, or even in the practice of teaching. But such experts need not have a truer vision of the proper ends of education in its fullest sense than a professor of mineralogy. Our universities will make a profound mistake if they feel that they have discharged their responsibilities to education by creating chairs and institutes of education. It appears probable, also, that too great a prestige is becoming attached to the word 'research' in education; certainly we are inclined to give far too great a weight to the opinion of a worker in some specialized field who speaks on broad educational issues. The 'scientific' sides of education

are still very new; they attract a very large number of research workers, particularly in America, and it is clearly true that, lacking the standards of the physical sciences or the humanities, and dealing with far more complex and difficult problems, much of that work is trivial or worthless. Yet its results are quoted with respect, and even made the basis for administrative action. It is alarming to find that a person who has done some statistical work on the correlation among eight-year-olds between reading quotients and capacity to stick pegs into holes, perhaps very valuable in its context, becomes thereby an 'educationalist' and qualified to speak with authority on the broadest questions of educational policy. The growth of isolated fields of specialist knowledge has no result more dangerous than the investment of experts in 'education' itself with an authority that their general culture may do nothing to warrant. It should be a humbling thought that there have been very few even moderately good books on education, and only one great one, and it took the greatest of all philosophers to write that one.

The increase in the size of the academic class has not, therefore, brought a strengthening of its power, but rather a weakening. Its diffused interests, its heterogeneity, and the increasing specialism of its members constitute a threat to its proper authority, and the knowledge that this authority has in the past been misused as a purely conservative force does not appreciably diminish the necessity for its proper use to-day, as the only appropriate means of defining the limitations of liberty concerning the content of education. Such authority is especially necessary when we are attempting to create a common or democratic culture, with the accompanying danger that

standards may be lost in too great a reverence for the opinions of majorities in matters, such as morals or æsthetics, where they are not valid.

It may be asked whether the use of advisory councils does not ensure an adequate statement of academic authority. The use of such councils and committees in educational matters of every kind, from the examination system to the use of visual aids, is becoming increasingly common. Ideally such bodies should exercise great authority. But there is a danger that they may be composed too exclusively of representatives of various interests—of local authorities, of teachers' organizations, and so on—and academic opinion may be voiced simply by 'experts' in education. The power possessed by such bodies will be only a source of error if it puts the means to modify our whole national culture into the hands of those who, whatever their distinction as administrators or psychologists or teachers, are without a synoptic vision of the real value of that culture.

The truth seems to be that the balance of liberty and authority in education imposes a grave responsibility upon the most distinguished of our academic men and women, particularly those in the universities. It is a responsibility to make themselves knowledgeable and concerned over general questions of educational policy; to speak with an authority that comes from an awareness of the value of a culture whose inheritors they are, and whose boundaries it is their highest duty to extend. It is for them to create an authority that is strong, yet which never crystallizes into an inelastic orthodoxy.

In the foregoing paragraphs it is with the curriculum of the grammar schools and the universities that we have

been most concerned. I am not suggesting that a committee of professors of philosophy should lay down curricula for secondary modern schools, though actually they would probably do it much better than most other committees. The education of these schools, that of the great majority of the population, is still in too embryonic a stage for us to be anything but experimental in our approach. The only limitations on experiment must come from the teachers themselves, and for many years they must be left free to create and adapt the content of an education that has yet barely an existence of its own. But even for these schools I believe that the guidance on general principles that the academic tradition can give to the grammar schools may be profoundly helpful.

Let us consider in conclusion a practical example of the kind of contribution which academic opinion could make at the present moment. One of the most pressing problems of our education (it has been the recurrent theme of this essay) is to decide what the equipment of the educated man should be at the university level, whatever his special subject. A small committee should be set up to consider this problem. It is true that there are too many committees. But this would differ from most in that its members would be chosen for personal qualities and not as representatives of interests and points of view. They would be mainly teachers in universities or schools and members of the inspectorate, and their function would be to consider the question in the light of first principles rather than to produce a colourless compromise of existing practices. They would not hear exhaustive evidence from interested parties that would lead them to a meaningless affirmation of the indispensability of every subject.

They should, if possible, take leave of absence for six months or a year from their ordinary work to visit schools, to talk, and read, and think round their problem. I believe that a comparatively short period of continuous and really intensive discussion would then produce a remarkable unanimity. If the idea seems fantastic, we have the Harvard Report as evidence that something like it can be achieved. With our greater experience of general education, and with the greater co-operation of the schools, we could avoid some of the mistakes of that report. But even a document as stimulating as that would do something to show that the academic world was beginning to be aware of its responsibilities.

It is symptomatic of the lack of cohesion in our intellectual life that the greatest difficulty would consist in the actual setting up of such a committee. The Ministry could scarcely undertake this task, for it would feel bound to invite too many representative members. The universities constitute the appropriate body, but the very phrase is almost meaningless, for the only common body shared by all the universities is the vice-chancellors' committee, of limited and ill-defined authority. But, nevertheless, it might be through this body that some effort might be made to undertake such a task. Such a report would carry no compulsion, of course; its influence would be exercised merely by stimulus and suggestion. But that influence would be a contributory factor in creating the ferment of discussion, the consciousness of responsibility, and the unity of interest in the academic world without which we cannot solve the problems of liberty and authority in our educational life.

If the ultimate authority as regards the intellectual

aspects of education must be sought in an informed academic opinion, where shall we look for a corresponding authority in the moral and religious spheres? It would, of course, be quite wrong to make a definite division between the cultural and moral elements in education. We have already emphasized that the two must be inter-diffused as completely as possible. Yet it is true that in practice there is a difference in the readiness with which we are prepared to accept a compulsion to teach all children arithmetic and one to teach them all divinity. Indeed, such a difference is legally recognized by the right given to parents to withdraw their children from religious teaching and not from other subjects.

Some of the very difficult questions raised by moral and religious teaching have already been touched upon. It is an essential part of education to foster or create certain moral attitudes; so much is seldom seriously denied. Very many thinkers would indeed maintain that its chief aim, to which all other activities must be subordinated, is the pursuit of goodness. But there will be some divergence if we attempt to lay down in detail the moral principles which are to form the basis for moral teaching, and much greater controversy as to how far such teaching must have a religious foundation. It will be fairly generally agreed that society has the right and the duty to demand that schools shall teach children that, for example, lying and stealing are wrong. Over the question whether such moral instruction should be related to the teaching of Jesus there will be less agreement; and a demand that all teachers should teach that Jesus was the Son of God would be regarded as a violation of proper liberty. We are here faced with a dilemma which arises from the whole character of

contemporary thought. If we believe that we know the nature of the Good, then surely it is our most important educational task to reveal that knowledge to others, just as we teach them the laws of arithmetic or chemistry. It is precisely for that view, shared of necessity to some extent by any educator, that naïve and superficial thinkers accuse Plato of fascism. And there is this justification for their view: that our society is based upon the view that in matters of religion and, to an as yet much less extent, in morals, there shall be the widest possible tolerance. We agree over the laws of chemistry; over religion we can but agree to differ, and such an agreement superficially offers an insecure basis for an education.

From 1870 until 1944 the State, in its control over the schools; took the view that the principles of moral behaviour required no support from religious beliefs. The schools were free to give religious teaching or not, as they thought fit, and, if given, such religious teaching had to be free of dogmatic elements, though precisely what was meant by this was left discreetly vague. The controversies of 1870 and 1902 showed how deeply the religious background of education was felt to affect the national life, but it was left for the Act of 1944 to take the remarkable course of compelling State-aided schools to include religious teaching and worship in their education, tolerance being preserved by making the teaching undenominational, and freedom maintained by giving the parent the right to withdraw the child from divinity lessons. The Act is attempting to overcome the dangers arising from a secular education that A. E. Taylor summarized in a passage that is worth quoting at some length:

It may quite well be that the future philosophical student of history will yet find the most significant and disquieting of all the social changes of the 'Victorian Age' to be the combination of universal state-enforced primary education with the transference of the work of the teacher to the hands of the layman under no effective ecclesiastical or theological control. The effect of this successful laicisation of education has inevitably been to raise the immediate practical question whether moral conduct, the direction of life, does not form a self-contained domain, and ethics a wholly autonomous science, neither requiring support or completion from religion, nor affording rational ground for religious convictions of any kind. The gravity of this practical issue can hardly be exaggerated. Something more momentous than even our national existence is at stake; the question is that of an ideal of life for the whole of future humanity. It is idle to hope, as some of our contemporaries perhaps are hoping, that the secularisation of education may at least leave religion in being as a graceful and desirable embellishment of life for the exceptionally sensitive and imaginative souls. It is of the very nature of a living religion to claim the supreme direction of effort and action. If the claim is disallowed, religion itself ceases to be real; if it is allowed, it is idle to dispute the right of religion to be made the foundation of education. A wrong answer to the question about the relations of morality and religion once generally accepted, is certain sooner or later, to be made the foundation of an educational policy, and adoption of a radically vicious educational policy means shipwreck for the spiritual future of mankind.<sup>1</sup>

It is not my purpose here to discuss the soundness of this argument, but to draw attention to the difficulty

<sup>1</sup> A. E. Taylor: *The Faith of a Moralist* (Macmillan, 1937).

which it raises. Where are we to look to-day for the 'effective theological control' of which Taylor speaks? What authority is there in our society that will be recognized as competent to decide the content and character of religious teaching by those actually engaged in educational work? The answer is: None at all. It is useless to expect any approach to the coherence of belief that I have urged as a necessity in the intellectual field. This is a characteristic of our age and our society that has been analysed by many writers, and which leads some, for example Mr T. S. Eliot, to a deeply pessimistic view of the spiritual future of our civilization. I must content myself with the observations of a practising teacher.

First, is the existence of this divergence of belief as disturbing as it sometimes appears? The absence of a recognized authority over certain aspects of life is the price that we must pay for tolerance. It may be that the whole experiment of religious tolerance is mistaken, and doomed to perish in a general disintegration of standards. If we believe this, then we must declare ourselves honestly as intolerant, and be prepared to define quite clearly the authority that we are prepared to accept in these matters. We cannot have it both ways, and speak wistfully of the need for spiritual authority while at the same time hoping to reap the reward of toughened individual consciences that religious liberty may be supposed to produce.

We may also ask if the disintegration is as deep as we sometimes imagine. It may well be that the ideas and presuppositions that we share are more common than we suppose, provided that we push forward with the task of reformulating them in terms relevant to the modern world, and it is such ideas that can legitimately be made

the basis for moral education. Nor must we mistake indifference for tolerance. It is not only right but necessary for teachers with strong moral and religious beliefs to state them. Such freedom is open to risk. But it is a risk that must be taken if we are to enrich the content of our education by a consciousness of the supreme importance of such beliefs for the conduct of life. The limits beyond which the individual must not go in his moral or religious indoctrination must be solved on the merits of each case. I do not believe that divergences in religious teaching necessarily bring in their train the evils that Taylor anticipated, provided that the variations rest on genuine and deeply held conviction. The problem in a particular school is, for example, best solved by agreement on a syllabus by those who are willing and anxious to give such teaching by reason of their common conviction of its value, whatever the divergences of their individual beliefs.

However dangerous the lack of an accepted authority in religion may seem to many people, it is plain that it cannot be avoided. It is the result of an attitude to which our society is irrevocably committed. But this is not to admit that such freedom must lead inevitably to a complete subjectivism in morals. It is in the prevention of such a decline that the recognition of proper authority in our intellectual life may prove of the greatest value. A determination to maintain that not all views are equally true, nor all pursuits equally valuable for the life of the mind, will stabilize the basis of moral judgments, even if their religious foundation is no longer a universally accepted authority. An emphasis on the value of the educated judgment, as opposed to that acceptance of

personal opinion that is one of the dangers of democracy, would have its effect upon the whole of life, and not least in the sphere of morals. It is the function of the schools, of the inspectorate, and, most of all, of the universities to make such an affirmation. Upon them rests the ultimate responsibility for maintaining the standards of culture through a time of immense social change, of ensuring that, as more men and women come into their inheritance of that culture, it has not been mortgaged and debased.